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=> d que L3

query

of for quaternary N in a King or chain

ELHILO 10/691427 5/4/04 Page 2 NODE ATTRIBUTES: NSPEC IS RC AT NSPEC IS RC 2 ATNSPEC IS RC AT3 NSPEC IS RC AΤ 4 NSPEC IS RC ΑT DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9 STEREO ATTRIBUTES: NONE SCR 2043 L7 3949 SEA FILE=REGISTRY SSS FUL L3 AND L5 L13 Subset search in a ring 87 polymers NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS STEREO ATTRIBUTES: NONE L1.587 SEA FILE=REGISTRY SUB=L7 SSS FUL L13 L16 59 SEA FILE=HCAPLUS ABB=ON L15 L17 2 SEA FILE=HCAPLUS ABB=ON L16 AND (HAIR OR KERAT?) T.18 3 SEA FILE=HCAPLUS ABB=ON L16 AND COSMETIC?/SC L19 8 SEA FILE=HCAPLUS ABB=ON L16 AND DYE? L20 1 SEA FILE=HCAPLUS ABB=ON L16 AND ?SILOXAN? L21 12 SEA FILE=HCAPLUS ABB=ON (L17 OR L18 OR L19 OR L20) L22 3 SEA FILE=HCAPLUS ABB=ON L16 AND COSMETIC?/SC,SX 12 CA references with willity L23 12 SEA FILE=HCAPLUS ABB=ON L21 OR L22 => d 123 1-12 all hitstr L23 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN 2002:608001 HCAPLUS ANDN 137:177096 ED Entered STN: 14 Aug 2002 Photopolymerizable composition containing novel borate compound ΤI polymerization initiator for photoimaging recording material ΙN Arai, Kinzo; Fukushige, Yuichi PA Fuji Photo Film Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 31 pp.

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CODEN: JKXXAF
\mathsf{DT}
        Patent
T.A
         Japanese
         ICM G03F007-029
IC
         ICS C08F002-50; C08F004-52; C08F020-00; G03F007-004; G03F007-027
         74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other
         Reprographic Processes)
         Section cross-reference(s): 35, 38
FAN.CNT 1
                                                                            APPLICATION NO. DATE
         PATENT NO.
                                    KIND DATE
                                                                            _____
                                      ____
                                                _____
        JP 2002229203 A2
                                                 20020814
                                                                             JP 2001-25685 20010201
PRAI JP 2001-25685
                                                  20010201
OS
        MARPAT 137:177096
         The photopolymerizable composition comprises radically polymerizable compds.
         and a photopolymn. initiator, wherein the polymerization initiator is a borate
         compound represented by (R1R2R3R4B-)nZm+X-(m-n) (R1-4 = alkyl, aryl, aryl,
         heterocyclyl, silyl; Mm+ = cationic polymer; X-(m-n) = anion; m, n =
         integer). The recording material comprising the photopolymerizable composition
         and color components are also claimed. The use of the photopolymerizable
         composition in the recording material provided high sensitivity, good
         dye bleaching property, and excellent storage stability.
         photopolymerizable compn borate compd polymn initiator photoimaging
ST
         recording material
ΙT
         Optical recording materials
               (photopolymerizable composition containing novel borate compound
polymerization initiator
              for photoimaging recording material)
IT
         Polyurethanes, uses
         RL: TEM (Technical or engineered material use); USES (Uses)
               (photopolymerizable composition containing novel borate compound
polymerization initiator
               for photoimaging recording material)
         Photoimaging materials
IT
               (photopolymerizable; photopolymerizable composition containing novel borate
               compound polymerization initiator for photoimaging recording material)
         Polymerization catalysts
TT
               (photopolymn.; photopolymerizable composition containing novel borate
compound
              polymerization initiator for photoimaging recording material)
         50292-95-0
TΤ
         RL: TEM (Technical or engineered material use); USES (Uses)
               (electron-donating colorless dye; photopolymerizable composition
               containing novel borate compound polymerization initiator for photoimaging
recording
              material)
         153491-85-1
ΙT
         RL: RCT (Reactant); RACT (Reactant or reagent)
               (photopolymerizable composition containing novel borate compound
polymerization initiator
               for photoimaging recording material)
         83063-75-6 205988-32-5
                                                    330804-60-9
IT
         RL: CAT (Catalyst use); USES (Uses)
               (polymerization initiator; photopolymerizable composition containing novel
borate
               compound polymerization initiator for photoimaging recording material)
         446840-27-3P
TT
         RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation);
         USES (Uses)
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(polymerization initiator; photopolymerizable composition containing novel borate

compound polymerization initiator for photoimaging recording material)

IT 446036-71-1P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(shell of microcapsule; photopolymerizable composition containing novel

borate

compound polymerization initiator for photoimaging recording material)

IT 303153-82-4

RL: TEM (Technical or engineered material use); USES (Uses)

(spectra sensitizer; photopolymerizable composition containing novel borate compound polymerization initiator for photoimaging recording material)

IT 120370-27-6

RL: TEM (Technical or engineered material use); USES (Uses)

(spectra sensitizing promoting agent; photopolymerizable composition containing

novel borate compound polymerization initiator for photoimaging recording material)

IT 83063-75-6 205988-32-5

RL: CAT (Catalyst use); USES (Uses)

(polymerization initiator; photopolymerizable composition containing novel borate

compound polymerization initiator for photoimaging recording material)

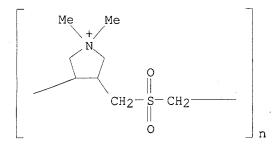
RN 83063-75-6 HCAPLUS

CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI) (CA INDEX NAME)

● C1-

RN 205988-32-5 HCAPLUS

CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)methylenesulfonylmethylene chloride] (9CI) (CA INDEX NAME)



● Cl⁻

L23 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:366690 HCAPLUS

DN 137:147702

ED Entered STN: 16 May 2002

TI Alignments of nematic liquid crystal molecules on azo-**dye**-containing alternate self-assembled films investigated using attenuated total reflection method

AU Shinbo, Kazunari; Ishikawa, Jun; Baba, Akira; Kaneko, Futao; Kato, Keizo; Advincula, Rigoberto C.

CS Department of Electrical and Electronic Engineering, Niigata University, Niigata, 950-2181, Japan

SO Japanese Journal of Applied Physics, Part 1: Regular Papers, Short Notes & Review Papers (2002), 41(4B), 2753-2758

CODEN: JAPNDE

PB Japan Society of Applied Physics

DT Journal

LA English

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 75

AB Photoinduced in-plane alignments of nematic liquid crystal (LC) mols., 5CB, have been investigated in a LC cell prepared with alternate self-assembled films of polyelectrolytes and low-mol.-weight azobenzene mols. on gold electrodes using the attenuated total reflection (ATR) measurement method. A high dichroism of the self-assembled film was observed with the irradiation

of
linearly polarized light. The ATR properties due to excitations of
surface plasmon polaritons (SPP) were observed in the LC cell and changed
with the irradiation of linearly polarized visible light to the LC cell. The
exptl. results corresponded well with the calculated shifts at different
orientation states of 5CB mols. It was estimated that the LC mols. have
in-plane alignments and that the LC mols. are oriented perpendicular to
the polarization direction of the irradiated visible light. The mol.
orientations could be controlled by the polarization direction of
irradiated light on the hybrid LC cell. In-situ observations for the cell
were also carried out during the irradiation Furthermore, the thickness and
dielec. consts. of the self-assembled films were evaluated using the ATR
method.

ST nematic liq crystal alignment azo **dye** attenuated total reflection; photoinduced alignment nematic liq crystal attenuated total reflection

```
ATR (attenuated total reflection)
ΙT
    Molecular orientation
        (alignments of nematic liquid crystal mols. on azo-dye-containing
        alternate self-assembled films investigated by attenuated total
        reflection)
IT
     Surface plasmon
        (alignments of nematic liquid crystal mols. on azo-dye-containing
        alternate self-assembled films investigated by attenuated total
        reflection in relation to)
TT
     Isomerization
        (cis-trans, photochem.; alignments of nematic liquid crystal mols. on
        azo-dye-containing alternate self-assembled films investigated by
        attenuated total reflection in relation to)
IT
    Liquid crystals
        (nematic; alignments of nematic liquid crystal mols. on azo-dye
        -containing alternate self-assembled films investigated by attenuated total
        reflection)
TΤ
     Dichroism
        (photoinduced; alignments of nematic liquid crystal mols. on azo-
        dye-containing alternate self-assembled films investigated by
        attenuated total reflection)
IT
     26062-79-3, Polydadmac
     RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
     (Physical process); PROC (Process)
        (Poly-DADMAC; alignments of nematic liquid crystal mols. on azo-
        dye-containing alternate self-assembled films investigated by
        attenuated total reflection)
TΤ
     2610-10-8, Direct Red 80
                               40817-08-1, 5CB 83063-75-6
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
     (Physical process); PROC (Process)
        (alignments of nematic liquid crystal mols. on azo-dye-containing
        alternate self-assembled films investigated by attenuated total
        reflection)
              THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
       18
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IΤ
    83063-75-6
    RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
     (Physical process); PROC (Process)
        (alignments of nematic liquid crystal mols. on azo-dye-containing
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alternate self-assembled films investigated by attenuated total

reflection)

RN 83063-75-6 HCAPLUS

• c1-

L23 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:142315 HCAPLUS

DN 136:361751

ED Entered STN: 22 Feb 2002

TI Photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo **dye** and alignments of LC molecules

AU Kaneko, Futao; Kato, Takashi; Baba, Akira; Shinbo, Kazunari; Kato, Keizo; Advincula, Rigoberto C.

CS Department of Electrical and Electronic Engineering, Niigata University, Niigata, 950-2181, Japan

Colloids and Surfaces, A: Physicochemical and Engineering Aspects (2002), 198-200, 805-810 CODEN: CPEAEH; ISSN: 0927-7757

PB Elsevier Science B.V.

DT Journal

LA English

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 66

AB Photoinduced surface relief gratings of alternate layer-by-layer self-assembled films containing azobenzene dyes were fabricated. The alignment properties of nematic liquid crystal (LC) mols. on these films were studied in a hybrid LC cell configuration.

Poly(diallyldimethylammonium chloride) (PDADMAC) and Direct Red 80 (DR80, azobenzene dye) were deposited using the alternate layer-by-layer self-assembly method. The gratings of the PDADMAC/DR80 films were fabricated by exposure to interference patterns of Ar+ laser light at 488 nm. The formation of the gratings on the films was observed using atomic force microscopy. Also, the alignment properties of LC mols., 5CB, on the films were studied by monitoring the change in birefringence of the LC cell in situ. This in-plane alignment was observed after .apprx.30 min exposure with the laser, simultaneous with the formation of the interference patterns.

ST photo fabrication surface relief grating self assembled film; azo dye alignment LC mol surface relief grating

IT Azo **dyes**Birefringence

Page 8 Diffraction gratings Liquid crystal displays Liquid crystals (alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo dye) ΙT Borosilicate glasses RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses) dye) IT Liquid crystals dye) TΤ Molecular orientation dye) ΙT Films ΤT 2610-10-8 (Uses) 2424-92-2, Eicosanedioic acid 17887-09-1 IΤ

(crown, gold-coated; alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo (nematic; alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo (photoinduced; alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo (self-assembled; alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo 40817-08-1, 5CB **83543-32-2** RL: PRP (Properties); TEM (Technical or engineered material use); USES (alignment of LC mols. and photoinduced fabrication of surface relief gratings in alternate self-assembled films containing azo dye) RL: TEM (Technical or engineered material use); USES (Uses) (alignment of LC mols. and photoinduced fabrication of surface relief

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gratings in alternate self-assembled films containing azo dye)

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- ΙT 83543-32-2

RE.CNT

20

- RL: PRP (Properties); TEM (Technical or engineered material use); USES
 - (alignment of LC mols. and photoinduced fabrication of surface relief

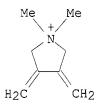
gratings in alternate self-assembled films containing azo dye)

RN 83543-32-2 HCAPLUS

CN Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 83543-31-1 CMF C8 H14 N . Cl



● cl-

L23 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:782514 HCAPLUS

DN 134:61954

ED Entered STN: 08 Nov 2000

TI Photo-induced structural changes of azobenzene Langmuir-Blodgett films

AU Matsumoto, M.; Terrettaz, S.; Tachibana, H.

CS National Institute of Materials and Chemical Research, Tsukuba, Higashi, 305-8565, Japan

SO Advances in Colloid and Interface Science (2000), 87(2,3), 147-164 CODEN: ACISB9; ISSN: 0001-8686

PB Elsevier Science B.V.

DT Journal

LA English

CC 66-1 (Surface Chemistry and Colloids) Section cross-reference(s): 41, 74

Structural changes of the Langmuir-Blodgett (LB) films of azobenzene AΒ accompanied by photoisomerization are described. First, photoisomerization is explained in terms of 'free volume'. In the polyion complex monolayers of amphiphiles having 2 azobenzene units at the air-water interface, the area per mol. depends on the polycation species. The fraction of cis-azobenzene in the LB films at the photostationary state under the illumination with UV light increased with increasing area per mol., which is consistent with the concept of free volume Second, a counter example of the concept of free volume is presented. 3D cone-shaped structures developed with trans-to-cis photoisomerization in the polyion complex LB film of a water-soluble amphiphilic azobenzene. These structures appeared and disappeared reversibly by alternate illumination with UV and visible light. The 2D LB film structure exerts significant modification by photoisomerization. This is against the concept of free volume because this concept does not consider the possibility that the 2D LB film structures may change into three-dimensional ones. Photo-induced J-aggregate formation of non-photochromic and photochromic dyes is described. Two cyanine dyes were each mixed with an amphiphilic azobenzene in the LB films. These cyanine dyes are

ST

IT

ΙT

ΙT

ΙT

TΤ

TT

ΙΤ

known to form J-aggregates in single-component LB films. In the mixed LB films, the J-aggregate formation was suppressed to some extent. The alternate illumination of the films with UV and visible light caused the photoisomerization of azobenzene in the mixed LB films, which triggered the J-aggregate formation of the cyanine dyes. The J-aggregate formation was accompanied by the development of 3D cone-shaped structures from the film surface. When an amphiphilic merocyanine was mixed with the azobenzene in the LB films, J-aggregate formation was also induced by the alternate illumination with UV and visible light. This J-aggregate formation was also accompanied by a large morphol. change: circular domains changed into fractal-like ones. The J-aggregate formation of the dyes and the concomitant morphol. change were irreversible. In these cases, the photoisomerization of azobenzene served as a trigger to induce self-organization of the dye mols. azobenzene LB film photoisomerization J aggregate photochromic dye Isomerization (cis-trans, photochem.; photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dyes) Photochromic materials (dyes; photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dves) J-aggregates Langmuir-Blodgett films Structural phase transition (photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dyes Dyes (photochromic; photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dyes) 174271-82-0 202518-20-5 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process) (azobenzene derivative; photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dyes) 67878-03-9 130184-21-3 220654-23-9 220654-26-2 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process) (dye; photo-induced structural changes of azobenzene LB films and J-aggregate formation of non-photochromic and photochromic dyes) 29322-34-7 29322-35-8 29792-49-2 31622-87-4 31622-88-5 83543-32-2 RL: PRP (Properties) (polycation; photo-induced structural changes of azobenzene LB films in relation to content of) THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 62

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- 83543-32-2

RL: PRP (Properties)

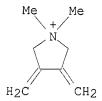
(polycation; photo-induced structural changes of azobenzene LB films in relation to content of)

83543-32-2 HCAPLUS RN

CN Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 83543-31-1 CMF C8 H14 N . Cl



● cl-

L23 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

ΑN 2000:360421 HCAPLUS

DN 133:127542

ED Entered STN: 31 May 2000

Surface relief gratings from electrostatically layered azo dye TΙ films

ΑU He, Jin-An; Bian, Shaoping; Li, Lian; Kumar, Jayant; Tripathy, Sukant K.; Samuelson, Lynne A.

CS Departments of Chemistry and Physics, Center for Advanced Materials, University of Massachusetts-Lowell, Lowell, MA, 01854, USA

SO Applied Physics Letters (2000), 76(22), 3233-3235 CODEN: APPLAB; ISSN: 0003-6951

PB American Institute of Physics

DT Journal

LA English

74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes)

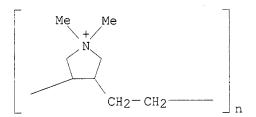
Surface relief gratings (SRGs) were fabricated on composite films assembled by alternate electrostatic deposition of a polyelectrolyte, poly(dimethyldiallylammonium chloride), and an organic azo dye, Congo red. The modulation of SRGs was found to increase with the thickness of the matrix films. Significant photochem. bleaching of the azo dye in the polymeric microenvironment as well as gradient-force-induced migration of the small azo dye contributes to the formation of the SRG structure. This finding demonstrates a facile method to fabricate SRGs for optical and information storage applications using com. available azo dyes and polyelectrolytes.

STelectrostatic layer adsorption polyelectrolyte azo dye surface relief grating

ΙT UV and visible spectra

(absorption; surface relief gratings fabrication on composite films

```
assembled by alternate electrostatic deposition of polyelectrolyte and
        azo dye in relation to)
TΨ
     Ionene polymers
     RL: PEP (Physical, engineering or chemical process); PRP (Properties);
     PROC (Process)
         (surface relief gratings fabrication on composite films assembled by
        alternate electrostatic deposition of polyelectrolyte and azo
        dye)
ΤT
     Absorption spectra
     Diffraction gratings
     Imaging
     Optical recording
         (surface relief gratings fabrication on composite films assembled by
        alternate electrostatic deposition of polyelectrolyte and azo
        dye in relation to)
ΙT
     573-58-0, Congo red
                             26062-79-3, Poly(dimethyldiallylammonium chloride)
     83063-75-6
     RL: PEP (Physical, engineering or chemical process); PRP (Properties);
     PROC (Process)
         (surface relief gratings fabrication on composite films assembled by
        alternate electrostatic deposition of polyelectrolyte and azo
        dye)
RE.CNT
        24
               THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
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     83063-75-6
ĬΤ
     RL: PEP (Physical, engineering or chemical process); PRP (Properties);
     PROC (Process)
        (surface relief gratings fabrication on composite films assembled by
        alternate electrostatic deposition of polyelectrolyte and azo
        dye)
RN
     83063-75-6 HCAPLUS
CN
     Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI)
     (CA INDEX NAME)
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● Cl -

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L23 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN
    1997:584561 HCAPLUS
AN
    127:180924
DN
    Entered STN: 13 Sep 1997
ED
    Preparation of dust-free peroxy compounds
TΙ
    Zeiss, Werner; Hartmann, Christoph; Ohme, Roland; Ballschuh, Detlef
IN
    Peroxid-Chemie Gmbh, Germany
PΑ
    Ger. Offen., 4 pp.
SO
    CODEN: GWXXBX
DT
    Patent
LA
    German
     ICM A61K007-135
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
    PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                                         DE 1996-19604274 19960206
    DE 19604274
                     A1 19970807
PΤ
                                          WO 1997-EP511
    WO 9728781
                      A1 19970814
        W: JP, US
         RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                     A1 19981209
                                       EP 1997-902329 19970205
     EP 881895
        R: DE
PRAI DE 1996-19604274
                           19960206
     WO 1997-EP511
                           19970205
AΒ
     Powdered peroxy or peroxo compds. for hair bleaches are wetted with
     an aqueous solution of a polyfunctional olefin monomer and dried to provide a
     polymeric coating on the particles for dust control. The treatment, which
     requires only very small amts. of monomer, also has an antistatic effect.
     The peroxy or peroxo compound itself may act as polymerization initiator.
Thus,
     200 g K peroxomonosulfate triple salt (2KHSO5.KHSO4.K2SO4) with a dust
     content of 2.26% was sprayed with 4 g 50% aqueous dimethyldiallylammonium
     chloride solution (containing 2 mol% methyltriallylammonium chloride as
     crosslinking agent and 0.1 g Na peroxodisulfate as supplementary
     initiator); polymerization occurred during drying in air.
     peroxy compd dustfree polymer coating; vinyl polymer coating peroxy compd;
ST
     hair bleach peroxy compd dustfree
ΙT
     Dust
        (airborne, control of; preparation of dust-free peroxy compds.)
ΙT
     Hair preparations
        (bleaches; preparation of dust-free peroxy compds.)
ΙT
     Air purification
        (dust suppression; preparation of dust-free peroxy compds.)
```

IT Airborne particles (dust, control of; preparation of dust-free peroxy compds.) IT Air pollution (particulate, control of; preparation of dust-free peroxy compds.) IT Peroxides, biological studies Polyolefins RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of dust-free peroxy compds.) ΙT Quaternary ammonium compounds, biological studies RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (salts with acrylates, polymers; preparation of dust-free peroxy compds.) ΙT 79-10-7D, 2-Propenoic acid, alkali metal salts, homopolymers, biological 79-10-7D, 2-Propenoic acid, esters, polymers, biological studies studies 79-41-4D, alkali metal salts, homopolymers 110-16-7D, 2-Butenedioic acid (Z)-, alkali metal salts, homopolymers 110-17-8D, 2-Butenedioic acid (E)-, alkali metal salts, homopolymers 621-82-9D, Cinnamic acid, alkali 1184-84-5D, Vinylsulfonic acid, alkali metal metal salts, homopolymers salts, homopolymers 1606-80-0D, Allylsulfonic acid, alkali metal salts, homopolymers 7727-21-1 7775-27-1, Sodium peroxodisulfate Polyacrylamide 15214-89-8D, alkali metal salts, homopolymers 19067-93-7 25014-12-4, Poly(methacrylamide) 26062-79-3, Poly(dimethyldiallylammonium chloride) 26949-19-9 37222-66-5 52047-44-6 57460-68-1 79314-06-0 125044-64-6 193969-47-0 193969-49-2 193969-51-6 193969-52-7 193969-55-0 193969-58-3 193969-60-7 193969-64-1 193969-65-2 193969-66-3 193969-67-4 193969-69-6 193969-71-0 193969-73-2 193969-74-3 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of dust-free peroxy compds.) IT 193969-69-6 193969-71-0 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (preparation of dust-free peroxy compds.) RN 193969-69-6 HCAPLUS CN Pyrrolidinium, 1,1-dimethyl-3-[[(2-propenyloxy)sulfonyl]methyl]-4-

(sulfomethyl) -, inner salt, homopolymer (9CI) (CA INDEX NAME)

CM1

> CRN 193969-68-5 CMF C11 H21 N O6 S2

$$Me$$
 Me Me N O $||$ O $||$

193969-71-0 HCAPLUS RN

Pyrrolidinium, 1,1-dimethyl-3-[[[(2-methyl-2-propenyl)oxy]sulfonyl]methyl]-CN 4-(sulfomethyl)-, inner salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 193969-70-9 CMF C12 H23 N O6 S2

L23 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:647964 HCAPLUS

DN 123:35202

ED Entered STN: 01 Jul 1995

TI Hydrophilic acrylonitrile polymer reinforcing and process fibers with silicate affinity

IN Schoening, Klaus-Juergen; Ellmann, Rita; Schmidt, Burkhard; Ballschuh,
Detlef; Ohme, Roland; Seibt, Horst; Engelbrecht, Lothar

PA Maerkische Faser AG Premnitz, Germany

SO Ger., 6 pp. CODEN: GWXXAW

DT Patent

LA German

IC ICM D01F011-06

ICS D01F006-38; D06M015-356; D06M013-342; C04B016-06

CC 40-5 (Textiles and Fibers)
 Section cross-reference(s): 58

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI DE 4316667 C1 19940818 DE 1993-4316667 19930513
PRAI DE 1993-4316667 19930513

Title fibers comprise a copolymer content of 5-15 weight% of an ester component and 0.6-1.4 weight% (meth)allylsulfonate and a film-forming coating comprising a polymeric pyrrolidinium salt 4-12, ethoxylated alkylammonium betaine 4-13, alkylbis(polyoxyethylene)ammoniumsulfobetaine sulfinate or sulfobetainesulfonate 4-7, nonionic surfactant 1-5, low mol. weight alc. or glycol 5-10, foam inhibitor 0.05-2, film-forming assistants 0.05-2, and water to 100 weight%. The fibers are readily incorporated in hydraulic binders, e.g. plaster, mortar, and concrete, have a good bond to the material, and produce good composite. An acrylonitrile-Me acrylate-sodium allylsulfonate copolymer (93.00:5.92:1.08) fiber was prepared, treated in an aqueous bath containing dimethyldiallylammonium chloride-sulfur dioxide copolymer,

hexadecyl/octadecylbis(polyoxyethylene)-3-sulfopropylammonium betaine, hexadecyl/octadecylbis(polyoxyethylene)-2-sulfinato-3-sulfopropylammonium betaine, hexadecyl/octadecylbis(polyoxyethylene)carboxymethylammonium betaine, ethoxylated C9-18 alcs, chain-cleaved di-Me siloxane, and a mixture of triethoxysilylpropylamine and the alcoholysis product of a chain cleaved di-Me siloxane, and are easily incorporated into a

building material. ST hydraulic binder reinforcement acrylic fiber; silicate acrylic fiber reinforcement; sulfoammonium betaine acrylic fiber reinforcement; ethoxylated alc acrylic fiber reinforcement; cement reinforcement acrylic fiber; concrete reinforcement acrylic fiber; mortar reinforcement acrylic fiber IT Betaines RL: NUU (Other use, unclassified); USES (Uses) (ethoxylated; hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) TΤ Cement Concrete Mortar (hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) IT Acrylic fibers, uses RL: TEM (Technical or engineered material use); USES (Uses) (in hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) TΤ Alcohols, uses RL: NUU (Other use, unclassified); USES (Uses) (fatty, ethoxylated, in hydrophilic acrylonitrile polymer reinforcingand process fibers with silicate affinity) ΤT Betaines RL: NUU (Other use, unclassified); USES (Uses) (sulfo-, ethoxylated, sulfinate; hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) TT 25053-78-5, Acrylonitrile-methyl acrylate-sodium allylsulfonate copolymer RL: TEM (Technical or engineered material use); USES (Uses) (fiber; hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) 26470-16-6, Dimethyldiallylammonium chloride-sulfur dioxide copolymer IT 26590-05-6, Acrylamide-dimethyldiallylammonium chloride copolymer 83063-75-6 RL: NUU (Other use, unclassified); USES (Uses) (hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) IT 71-36-3, Butanol, uses 107-88-0, 1,3-Butanediol 504-63-2, 1,3-Propanediol 9016-00-6D, Dimethyl siloxane, chain-cleaved 31900-57-9D, Dimethylsilanediol homopolymer, chain-cleaved RL: NUU (Other use, unclassified); USES (Uses)

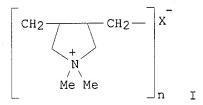
(in hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) IT 83063-75-6 RL: NUU (Other use, unclassified); USES (Uses)

(hydrophilic acrylonitrile polymer reinforcing- and process fibers with silicate affinity) RN

83063-75-6 HCAPLUS CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI) (CA INDEX NAME)

● cl -

L23 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN 1995:372888 HCAPLUS AN 122:163407 DN Entered STN: 24 Feb 1995 EDΤI Dyeing fabrics with particles showing color change by light and/or heat with good colorfastness Kitagawa, Yosuke; Hoshikawa, Ryuichi ΙN Matsui Shikiso Kagaku Kogyosho, Japan PΑ Jpn. Kokai Tokkyo Koho, 9 pp. SO CODEN: JKXXAF DT Patent LA Japanese ICM D06P005-00 IC ICS D06P005-00 40-6 (Textiles and Fibers) CC FAN.CNT 1 APPLICATION NO. PATENT NO. KIND DATE DATE _____ ____ _____ JP 06306777 Α2 19941101 JP 1993-113624 19930416 PΤ PRAI JP 1993-113624 19930416



Fabrics with thermochromic and/or photochromic shades are prepared by AΒ treating fabrics with N-containing cationic polymers and \mathbf{dyeing} the fabrics with liqs. containing particles exhibiting thermochromic and/or photochromic shades and treating the fabrics with thermoplastic polymers during the cationization or dyeing step or after the dyeing step. A woven cotton fabric was treated with an aqueous solution containing I for 30 min at 70°, rinsed, dyed with a liquid containing 15% (on fiber) aqueous 15% dispersion of microcapsules containing 3-diethylamino-7,8-benzofluoran and 0.5% PG Color Blue MI-IG for 15 min at

ST

ΙT

ΙT

ΙT

IΤ

IT

ΙT

IT

IT

ΙT

ΙT

IT

RN

CN

```
60°, and rinsed. The fabric was treated with an emulsion containing Bu
acrylate-Et acrylate-2-ethylhexyl acrylate copolymer for 15 min at
70°, rinsed, and dried to give a fabric exhibiting deep-purple
shade at \leq 22^{\circ} and blue shade at \geq 32^{\circ} and
crocking fastness rating (AATCC 8-1979; gray scale) 3 and washfastness
rating (JIS L-0844) 4.
textile dyeing thermochromic shade; cotton textile
dyeing thermochromic shade; photochromic shade textile
dyeing; washfastness textile dyeing thermochromic shade;
cationic polymer textile dyeing thermochromic shade
Urethane polymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
   (colorfastness improver; dyeing fabrics with particles
   showing color change by light and/or heat with good colorfastness)
Polyester fibers, uses
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)
   (cotton blends; dyeing fabrics with particles showing color
   change by light and/or heat with good colorfastness)
Rayon, uses
Textiles
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)
   (dyeing fabrics with particles showing color change by light
   and/or heat with good colorfastness)
Thermochromic substances
   (fabrics dyed with particles showing color change by heat as)
Photochromic substances
   (fabrics dyed with particles showing color change by light
   as)
Dyeing
   (of fabrics with particles showing color change by light and/or heat
   with good colorfastness)
Textiles
RL: PEP (Physical, engineering or chemical process); TEM (Technical or
engineered material use); PROC (Process); USES (Uses)
   (cotton, dyeing fabrics with particles showing color change
   by light and/or heat with good colorfastness)
Quaternary ammonium compounds, uses
RL: TEM (Technical or engineered material use); USES (Uses)
   (polymers, cationization agent; dyeing fabrics with particles
   showing color change by light and/or heat with good colorfastness)
83543-32-2
           144638-44-8, Sanfix PAC-7 161445-39-2, Fixer P
RL: TEM (Technical or engineered material use); USES (Uses)
   (cationization agent; dyeing fabrics with particles showing
   color change by light and/or heat with good colorfastness)
53465-37-5, Butyl acrylateethyl acrylate-2-ethylhexyl acrylate copolymer
77641-41-9, Hydran HW 311
                            161587-69-5
RL: TEM (Technical or engineered material use); USES (Uses)
   (colorfastness improver; dyeing fabrics with particles
   showing color change by light and/or heat with good colorfastness)
83543-32-2
RL: TEM (Technical or engineered material use); USES (Uses)
   (cationization agent; dyeing fabrics with particles showing
   color change by light and/or heat with good colorfastness)
83543-32-2 HCAPLUS
Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-, chloride, homopolymer
```

(9CI) (CA INDEX NAME)

CM 1

CRN 83543-31-1 CMF C8 H14 N . Cl

● c1-

L23 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:158575 HCAPLUS

DN 116:158575

ED Entered STN: 17 Apr 1992

TI Liquid body cleansers containing cationic polymers, glucose derivatives, and fatty acid soaps

IN Takada, Yuichi; Yuizono, Makoto; Inaizumi, Mika

PA Lion Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-50

ICS C08L039-02; C11D009-22

CC 62-4 (Essential Oils and Cosmetics)

FAN.CNT 1

GI

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 03227914	A2	19911008	JP 1990-21571	19900131
PRAI	JP 1990-21571		19900131		

AB A liquid cleansing composition, which is creamy and producing foams, for human body consists of (1) higher fatty acid soap 5-30, (2) cationic polymers (Markush given) 0.05-1.0 and (3) glucose derivs. I (R, R1 = C8-20 alkyl; x + y = 50-200) 0.3-10.0% by weight The cationic polymers may be poly(dimethyldialkylammonium chloride), copolymers of

dimethyldiallylammonium chloride and acrylamide, and cationic hydroxyethyl cellulose. Thus, a liquid cleansing composition was prepared consisting of a coconut oil fatty acid K salt-K myristate mixture (1:3 by weight) 15, Maquat-550 0.2, I (RCO2, R1CO2 = oleic acid ester; x + y = 120) 1, coconut oil fatty acid diethanolamide 1, propylene glycol 5, 1,3-butylene glycol 5, Na4 EDTA 0.1, perfume 1, and water to 100% by weight

soap glucose deriv polymer

ΙT Cosmetics

> (cleansing, cationic polymers and glucose derivs. and fatty acid soaps in)

ΙT Fatty acids, compounds

RL: BIOL (Biological study)

(coco, potassium salts, body cleanser containing)

TΨ 50-99-7D, D-Glucose, derivs. 9004-62-0, Hydroxyethyl cellulose 26062-79-3, Dimethyldiallylammonium chloride polymer 26590-05-6 26590-05-6, Maquat 550 81859-24-7, Leogard G **83543-32-2** 139895-03-7

RL: BIOL (Biological study) (body cleanser containing)

ΙT 13429-27-1, Potassium myristate

RL: BIOL (Biological study)

(liquid body cleansers containing)

ΙT 83543-32-2

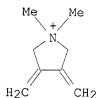
> RL: BIOL (Biological study) (body cleanser containing)

RN 83543-32-2 HCAPLUS

Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-, chloride, homopolymer CN (9CI) (CA INDEX NAME)

CM 1

CRN 83543-31-1 CMF C8 H14 N . Cl



● Cl-

L23 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

ΑN 1990:11788 HCAPLUS

DN 112:11788

ED Entered STN: 06 Jan 1990

Hair conditioners comprising pyrrolidonium chloride polymer

Hamann, Albrecht; Neumann, Wolfgang; Koch, Walter; Staeck, Rainer; ΙN Biering, Holger; Schuessling, Ernst; Stoye, Manfred; Mackowiak, Joachim; Peter, Thomas

PΑ VEB Chemiekombinat Bitterfeld, Ger. Dem. Rep.

Ger. (East), 4 pp.

CODEN: GEXXA8

Patent DT

LA German

ICM A61K007-11 IC

62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

APPLICATION NO. DATE PATENT NO. KIND DATE ______ ____ DD 1987-303374 19870601 DD 266228 A3 19890329 PΙ 19870601 PRAI DD 1987-303374

MARPAT 112:11788 OS

A hair conditioner comprises urea 0.2-2.0, poly(vinyl alc.) AΒ (partially saponified; acid number < 3) 0.15-1.0, poly(1,1-dimethyl-3,4dimethylenepyrrolidonium chloride) (mol. weight >30,000) 0.15-3.0, EtOH and/or PrOH 1.0-20.0, mixts. of mono- and dialkylpolyglycol phosphates 0-0.65, organic or inorg. acids or salts 0.1-0.5, nonylphenyl polyglycol ether 0-0.65 NH3 or triethanolamine 0.01-0.5, and water to 100% by weight The phosphates are (RO)(R1O)P(O)OH [R = H(CH2)n(CH2)m; R1 = R, H; n = 16-18; m = 7-9].

hair conditioner polypyrrolidonium chloride

IΤ Hair preparations

(conditioners, pyrrolidonium chloride polymers-containing)

57-13-6, Urea, biological studies 9002-89-5D, Poly(vinyl alcohol), ΙT partially hydrolyzed 25852-91-9D, alkyl derivs. 124303-34-0 RL: BIOL (Biological study)

(hair conditioner containing)

ΙT 124303-34-0

RL: BIOL (Biological study)

(hair conditioner containing)

124303-34-0 HCAPLUS RN

Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-2-oxo-, chloride, CN homopolymer (9CI) (CA INDEX NAME)

CM1

CRN 124303-33-9 CMF C8 H12 N O . Cl

● Cl-

L23 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

1983:584959 HCAPLUS ΑN

99:184959 DN

ED Entered STN: 12 May 1984

Light-sensitive photographic silver halide material containing an antistatic agent

Plaschnick, Dieter; Kuhrt, Angela; Meisel, Ulrich; Bley, Mechthild; TN Jaeger, Werner; Wandrey, Christine; Linow, Karl Joachim

PΑ VEB Filmfabrik Agfa, Ger. Dem. Rep.

SO Ger. (East), 10 pp.

CODEN: GEXXA8

DTPatent

LA German

IC G03C001-82

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DD 200395 PRAI DD 1981-233614	Z	19830504 19810928	DD 1981-233614	19810928

$$\begin{array}{c|c}
R^2 R^3 \\
\hline
 CR^1 \\
 N + X \\
R^4 R^5
\end{array}$$

$$\begin{array}{c|c} - & \text{CH}_2 \\ \hline \\ N + \\ \text{Me2} \end{array} \begin{array}{c} \text{CH}_2 \\ \hline \\ \text{C1} \end{array} \begin{array}{c} \text{CH}_2 \\ \hline \\ \text{CH}_2 \\ \hline$$

Photog. materials having improved antistatic characteristics contain in an AB antihalation layer, interlayer, or top layer a homo- or copolymer having repeating units with a quaternary ammonium structure of the formula I (R-R3 = H or C1-6 alkyl; R4,R5 = C1-18 alkyl; X- = halide, NO3-, OH-,HSO4-, SO42-, n=100-600) as the antistatic agent. The antistatic agent, which has no adverse effects on the phys.-mech. properties of the photog., can contain a vinyl compound, such as acrylic acid, arylamide, arylonitrile, diacetoneacrylamide, or vinylpyrrolidone, as the comonomer. Thus, a color photog. material carrying an antihalation back layer containing the polymer II, the polymeric acid HO2C(CH2CMePh)CO2H, and a triphenylmethane dye showed a surface resistance of 5.2 + 106 Ω and excellent antistatic characteristics.

II

- ST quaternary ammonium polymer antistatic photog
- IT Photographic films

(containing quaternary ammonium group-containing polymer for improved antistatic properties)

IΤ Phenolic resins, uses and miscellaneous

RL: USES (Uses)

(photog. materials with antistatic layer containing quaternary ammonium group-containing polymer and)

ITQuaternary ammonium compounds, polymers

RL: USES (Uses)

(polymers, photog. films containing, for improved antistatic properties)

ΙT Antistatic agents

(quaternary ammonium group-containing polymers as, for photog. materials)

IT 83063-75-6 83084-46-2 87516-73-2

RL: USES (Uses)

(antistatic agent, for photog. materials)

IT 87524-46-7

RL: USES (Uses)

(photog. films containing quaternary ammonium group-containing polymer and,

for

improved antistatic properties)

79-06-1D, polymers with quaternary ammonium compds. 79-10-7D, polymers with quaternary ammonium compds. 88-12-0, uses and miscellaneous 107-13-1D, polymers with quaternary ammonium compds. 2873-97-4 87516-85-6

Page 24

RL: TEM (Technical or engineered material use); USES (Uses) (photog. materials containing, for improved antistatic properties)

IT 9016-83-5

RL: USES (Uses)

(photog. materials with antistatic layers containing quaternary ammonium group-containing polymer and)

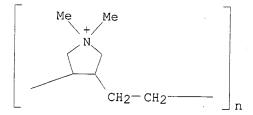
IT 83063-75-6 83084-46-2 87516-73-2

RL: USES (Uses)

(antistatic agent, for photog. materials)

RN 83063-75-6 HCAPLUS

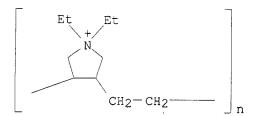
CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI) (CA INDEX NAME)



• cl-

RN 83084-46-2 HCAPLUS

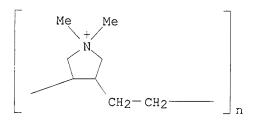
CN Poly[(1,1-diethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI) (CA INDEX NAME)



• c1-

RN 87516-73-2 HCAPLUS

CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl hydroxide] (9CI) (CA INDEX NAME)



● OH-

IT 87516-85-6

RL: TEM (Technical or engineered material use); USES (Uses)
(photog. materials containing, for improved antistatic properties)

RN 87516-85-6 HCAPLUS

CN Pyrrolidinium, 1,1-dimethyl-3,4-bis(methylene)-, chloride, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 83543-31-1 CMF C8 H14 N . C1

● Cl-

CM 2

CRN 88-12-0 CMF C6 H9 N O

L23 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2004 ACS on STN

ΑN 1982:518184 HCAPLUS

DN 97:118184

ED Entered STN: 12 May 1984

Mordanting of filter dyes in photographic materials TI

Meisel, Ulrich; Plaschnick, Dieter; Luu, Trong Hong; Wandrey, Christine; ΙN Bach, Guenter; Jaeger, Werner; Hahn, Mathias; Seehaus, Friedhelm; Linow, Karl Joachim; Philipp, Burkart
VEB Filmfabrik Wolfen, Fotochemisches Kombinat, Ger. Dem. Rep.

PA

SO Ger. (East), 16 pp.

CODEN: GEXXA8

DT Patent

LAGerman

IC G03C001-84

ICA G03C001-40

74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE -----______ DD 153002 Z 19811216 DD 1980-223799 19800909 PRAI DD 1980-223799 19800909 GI

$$\begin{bmatrix} CH_2 - CH - CH - CH_2 \\ H_2C & CH_2 \\ N + R^1 R^2 \end{bmatrix}_n$$

Almost all conventional acid filter dyes can be rendered nondiffusing in emulsion or thin auxiliary layers, without lowering their phys.-mech. properties or interference with their bleachability or washing-out during processing by a small amount of a mordant (I; R1,R2 = C1-4 alkyl; n = 300-600; and X- = anion). Added as storable 5-10% solution they have a low water absorption and have little effect on the viscosity of gelatin coatings. Thus, 2 solns. were made both containing gelatin 100 and a pentamethine dye 8, and as mordant solution A an imide of maleic anhydride interpolymers of US 3,048,487 (CA 59; 7726b) 4 g, and solution B I (R1,R2 = Me, n = 300, X = Cl-) 4.15 g. A Yielded a 2.3 μ filter layer having an optical d. of 1.09, and B one of 2.0 μ and 0.98, resp. The water absorption of the layers was 4.1 and 3.0 g H20/m2, and the dye diffusion after 2 wet contacts with a layer of unhardened gelatin 43 and 2% (as optical d.), resp.

ST filter dye mordant photog

IT Photographic films

(filter dye mordanting agents for)

IT Photographic films

(color, diffusion-transfer, mordanting agents for filter dyes
for)

IT 83063-75-6

RL: USES (Uses)

(mordanting agent, for photog. filter dyes)

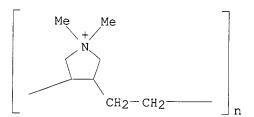
IT 83063-75-6

RL: USES (Uses)

(mordanting agent, for photog. filter dyes)

RN 83063-75-6 HCAPLUS

CN Poly[(1,1-dimethylpyrrolidinium-3,4-diyl)-1,2-ethanediyl chloride] (9CI) (CA INDEX NAME)



• cl -

```
1 SEA FILE=HCAPLUS ABB=ON 2002:831728/AN
L3
           8
           С
```

NODE ATTRIBUTES:

L1

NSPEC	IS	RC	AT	1
NSPEC	IS	RC	AT	2
NSPEC	IS	RC	\mathtt{AT}	3
NSPEC	IS	RC	AT	4
NSPEC	IS	RC	AT	5
DEFAULT	MLE	CVEL	IS ATOM	
DEFAULT	ECI	LEVEI	IS LIM	ITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

SCR 2043

3949 SEA FILE=REGISTRY SSS FUL L3 AND L5 L7

L8 7694 SEA FILE=HCAPLUS ABB=ON L7

L24 1 SEA FILE=HCAPLUS ABB=ON L1 AND L8

=> d l14 all hitstr

YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y) /N:n

=> d l24 all hitstr

L24 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:831728 HCAPLUS ΑN

DN 137:329257

Entered STN: 01 Nov 2002 ED

Hair dyes containing active conditioning ingredients TΙ

ΙN Wolff, Wolfgang; Akram, Mustafa; Tanaka, Hiroshi

PΑ Hans Schwarzkopf Gmbh & Co. Kg, Germany

SO Ger. Offen., 24 pp.

CODEN: GWXXBX

DT Patent

LA German

IC ICM A61K007-13

62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

ran.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 10120914	A1	20021031	DE 2001-10120914	20010427
	WO 2002087515	A2	20021107	WO 2002-EP4275	20020418
	WO 2002087515	A3	20031030		
	M. AH TO	HC			

W: AU, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

applicants

```
EP 1385468
                       Α2
                             20040204
                                            EP 2002-730173
                                                             20020418
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, FI, CY, TR
PRAI DE 2001-10120914 A
                             20010427
     WO 2002-EP4275
                       W
                             20020418
     The invention concerns hair dye formulations that include a combination of
AB
     active conditioners selected from the group of amino-functionalized
     polysiloxanes and quaternary ammonium-acrylic copolymer. The conditioners
     are included in oxidative and direct hair dyes. Thus a dye cream
     contained (weight/weight%): aqueous ammonium carbopol solution (1%) 15.0;
Lanette E
     0.70; sodium lauryl ether sulfate (27% aqueous solution) 4.40; PEG-400 0.60;
     potassium oleate (12.5 aqueous solution) 3.00; titanium dioxide 0.50;
     cetylstearyl alc. 50/50 12.00; Eumulgin B2 3.00; Eutanol G 2.00; Cutina
     AGS 2.00; Cutina GMS-SE 2.00; XF42-B1989 (Amodimethicone) 1.50; potassium
     hydroxide (50% aqueous solution) 0.48; tetrasodium EDTA 0.40; sodium sulfite
     0.10; ascorbic acid 0.05; Merquat Plus 3330 2.00; perfume 0.50; ammonia
     (25% aqueous solution) 6.00; Aerosil 200 0.25; p-toluenediamine sulfate 0.460;
     resorcin 0.200; m-aminophenol 0.026; 2,6-diaminopyridine 0.010;
     2,4-diaminophenoxyethanol dihydrochloride 0.012; water to 100.
ST
     hair dye conditioner aminofunctionalized polysiloxane quaternary ammonium
     acrylic copolymer
     Polysiloxanes, biological studies
ΙT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        ([(aminoethyl)amino]propyl hydroxy, di-Me; hair dyes containing active
        conditioning ingredients)
     Polysiloxanes, biological studies
IΤ
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (amino-functionalized; hair dyes containing active conditioning
        ingredients)
ΙT
     Hair preparations
        (conditioners; hair dyes containing active conditioning ingredients)
ΙT
     Dyes
        (direct; hair dyes containing active conditioning ingredients)
ΙT
     Hair preparations
        (dyes, oxidative; hair dyes containing active conditioning ingredients)
IT
     Hair preparations
        (dyes; hair dyes containing active conditioning ingredients)
IT
     Oxidizing agents
        (hair dyes containing active conditioning ingredients)
     Quaternary ammonium compounds, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing active conditioning ingredients)
ΙT
     Acrylic polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (quaternary ammonium-acrylic copolymer; hair dyes containing active
        conditioning ingredients)
     99-56-9, 1,2-Diamino-4-nitrobenzene 108-46-3, Resorcin, biological
ΙT
              120-72-9D, Indole, derivs. 123-30-8, p-Aminophenol
     studies
     2,6-Diaminopyridine 496-15-1D, Indoline, derivs.
     m-Aminophenol
                    2835-95-2, 5-Amino-2-methylphenol
     p-Toluenediamine sulfate
                                9016-00-6D, Dimethylpolysiloxane, derivs.
     25136-75-8, Merquat Plus 3330
                                     66422-95-5, 2,4-
     Diaminophenoxyethanol dihydrochloride
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing active conditioning ingredients)
ΙT
     25136-75-8, Merquat Plus 3330
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing active conditioning ingredients)
```

RN 25136-75-8 HCAPLUS

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1



$$\begin{array}{c|c} \operatorname{Me} & & \operatorname{H_2C} = \operatorname{CH-CH_2-N-CH_2-CH} = \operatorname{CH_2} \\ & & \operatorname{Me} \end{array}$$

CM

CRN 79-10-7 CMF C3 H4 O2

$$\begin{array}{c} \circ \\ \parallel \\ \text{HO-C-CH} = \text{CH}_2 \end{array}$$

CM3

CRN 79-06-1 CMF C3 H5 N O

 \Rightarrow \Rightarrow d 131 1-34 bib abs hitind hitstr

L31 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:198245 HCAPLUS

DN 140:240598

TICombination of oxydative hair dyes with indole or indoline dyes for improved color equalizing

ΙN Akram, Mustafa; Rath, Susanne; Hoeffkes, Horst

PΑ Henkel K.-G.a.A., Germany

SO

CODEN: GWXXBX

DΤ Patent

Ger. Offen., 28 pp.

```
T.A
     German
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO.
PΙ
     DE 10240758
                      A1
                            20040311
                                           DE 2002-10240758 20020830
     WO 2004024109
                     A1
                           20040325
                                           WO 2003-EP9249
                                                            20030821
         W: AU, BR, CA, CN, JP, NO, PL, RU, US, VN
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
PRAI DE 2002-10240758 A
                           20020830
OS
     MARPAT 140:240598
     The invention concerns hair dye combinations containing indole or
AΒ
     indoline dyes for improved color equalizing along with coupling
     and developing components. The hair dyes also contain silicones
     and polydimethyldiallyl ammonium compds. Thus a composition contained
     (weight/weight%): cetyl alc. 14.00; glycerin monostearate NSE 2.10; Cetiol V
     2.50; Plantaren 2000 0.50; Hycrylmulgol 012 5.45; potassium olein soap
     (12.5%) 10.00; ammonium rohagit solution (6%) 5.00; ammonium carbopol solution
     (1%) 10.00; titanium dioxide 0.50; tetrasodium EDTA 0.20; ammonia (25%)
     8.00; ascorbic acid 0.5; sodium sulfite 0.10; phospholipid EFA 1.00;
     Mirapol A15 0.25; perfume 0.4; 5,6-dihydroxyindoline hydrobromide 0.02;
     2-Me resorcin 0.10; p-tolylene diamine sulfate 1.45; resorcin 0.50;
     2-amino-3-hydroxypyridine 0.09; m-aminophenol 0.12; 3-methyl-4-aminophenol
     0.01; 2,2'-dihydroxy-4,4'-diamino-diphenyl methane dihydrochloride 0.08;
     4(2-hydroxyethyl)amino-2-aminoanisol 0.03; 2-chloro-3-amino-6-methylphenol
     0.02; water to 100.
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
     oxidative hair dye indole indoline diaminopyrazole deriv color
ST
     equalizer
     Polysiloxanes, biological studies
ΙT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (combination of oxydative hair dyes with indole or indoline
        dyes for improved color equalizing)
IT
        (direct; combination of oxydative hair dyes with indole or
        indoline dyes for improved color equalizing)
TΨ
     Hair preparations
        (dyes, oxidative; combination of oxydative hair dyes
        with indole or indoline dyes for improved color equalizing)
ΙT
     Hair preparations
        (dyes; combination of oxydative hair dyes with
        indole or indoline dyes for improved color equalizing)
IT
     108-46-3, Resorcin, biological studies
                                            120-72-9D, Indole, derivs.
     496-15-1D, Indoline, derivs. 591-27-5, m-Aminophenol
                                                             608-25-3,
     2-Methyl resorcin
                        1004-74-6, 2,4,5,6-Tetraamino pyrimidine
                                                                    2835-95-2,
     4-Amino-2-hydroxytoluene
                              2835-99-6, 3-Methyl-4-aminophenol
     5,6-Dihydroxyindole 6369-59-1 16461-98-6D, 1H-Pyrazole-4,5-diamine,
    derivs.
              16867-03-1, 2-Amino-3-hydroxypyridine 26062-79-3,
    Merquat 100 26590-05-6, Merquat 500
                                         29539-03-5,
     5,6-Dihydroxyindoline 83763-47-7
                                         84540-50-1, 2-Chloro-3-amino-6-
    methylphenol
                   138937-28-7, 5,6-Dihydroxyindoline hydrobromide
    155601-17-5
                  364343-79-3
                                 668476-71-9
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (combination of oxydative hair dyes with indole or
        indoline dyes for improved color equalizing)
ΙT
    26062-79-3, Merquat 100 26590-05-6, Merquat 500
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (combination of oxydative hair dyes with indole or
```

Page 32

indoline dyes for improved color equalizing)

26062-79-3 HCAPLUS RN

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● c1-

26590-05-6 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

L31 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2004:179966 HCAPLUS ΑN

DN 140:204801

```
TΙ
     Hair preparations containing polysiloxanes and
     cyclosiloxanes
ΙN
     Nagai, Hidetaka; Takayama, Aimi
PΑ
     Hoyu Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 15 pp.
    CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     -----
     JP 2004067652
                     A2 20040304
PΤ
                                           JP 2002-232945 20020809
PRAI JP 2002-232945
                           20020809
     This invention relates to hair dyes and bleaches which comprise
     (1) cyclosiloxanes, (2) amino-modified silicones, (3) highly
     polymerized methylpolysiloxanes, and/or (4) highly polymerized
     amino-modified silicones to provide smooth hair after treatment.
     prepns. may further comprise amphoteric polymers and/or cationic polymers.
     For example, a hair dye preparation comprised (1) component A containing
     p-phenylenediamine 1, resorcin 1, ammonia water (28 %) 2, monoethanolamine
     (80 %) 6, cetostearyl alc. 6, polyoxyethylene cetyl ether 4, polyethylene
     glycol 5, decamethylcyclopentasiloxane 1.5,
     aminoethylaminopropylsiloxane-dimethylsiloxane copolymer
     1.5, methylpolysiloxane 0.2, acrylamide-acrylic
     acid-dimethyldiallylammonium chloride copolymer 1, and distilled water
     balance to 100 %; and (2) component B containing H2O2 (35 %solution) 17,
     cetostearyl alc. 2, polyoxyethylene cetyl ether 0.5,
     stearyltrimethylammonium chloride 1, sodium stannate 0.1, phosphoric acid
     q.s. to pH 3.5, and distilled water balance to 100 %.
     ICM A61K007-06
IC
     ICS A61K007-13; A61K007-135
CC
     62-3 (Essential Oils and Cosmetics)
ST
     hair dye bleach amino contg polysiloxane
     cyclosiloxane
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Me; hair dyes and bleaches containing polysiloxanes
        and cyclosiloxanes and conditioning polymers)
     Polysiloxanes, biological studies
ΙT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (amino-containing; hair dyes and bleaches containing
        polysiloxanes and cyclosiloxanes and conditioning
        polymers)
ΤТ
     Hair preparations
        (bleaches; hair dyes and bleaches containing
        polysiloxanes and cyclosiloxanes and conditioning
        polymers)
TΤ
     Hair preparations
        (dyes; hair dyes and bleaches containing
        polysiloxanes and cyclosiloxanes and conditioning
        polymers)
ΙT
     Cyclosiloxanes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes and bleaches containing polysiloxanes and
        cyclosiloxanes and conditioning polymers)
TΤ
    541-02-6, Decamethylcyclopentasiloxane 25136-75-8,
    Acrylamide-acrylic acid-dimethyldiallylammonium chloride copolymer
    156623-21-1
                  333974-49-5
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
```

(hair dyes and bleaches containing polysiloxanes and cyclosiloxanes and conditioning polymers)

IT 25136-75-8, Acrylamide-acrylic acid-dimethyldiallylammonium chloride copolymer

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyes and bleaches containing

polysiloxanes and cyclosiloxanes and conditioning
polymers)

RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 79-06-1 CMF C3 H5 N O

L31 ÄNSWER 3 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:719277 HCAPLUS

DN 139:249961

TI Method of gradual permanent coloring of hair

```
IN
     Patel, Jitendra; Newell, Gerald Patrick; Kim, Elizabeth; Pascual, Fe
     Padilla; Fowler, Margie Ann
PΑ
     Unilever Plc, UK; Unilever Nv; Hindustan Lever Limited
SO
     PCT Int. Appl., 61 pp.
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                         APPLICATION NO. DATE
                                          ______
PΙ
    WO 2003074016
                     A1 20030912
                                         WO 2003-EP2450 20030306
        W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
             FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK,
             SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW,
             AM, AZ, BY, KG
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,
             NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
     US 2003172466
                    A1 20030918
                                          US 2002-92609
                                                           20020307
                      B2
     US 6709468
                           20040323
PRAI US 2002-92609
                           20020307
                      Α
    A method for permanently dyeing hair which comprises subjecting
     said hair to a number of treatments, having a set time interval between each
     two consecutive such treatments, wherein each treatment comprises steps
     (a) and (b) below: (a) contacting said hair, for a period of about 5 s to
     about 5 min with a recently made mixture of: (i) part (ai) dye
     intermediates in water at alkaline pH with quaternary ammonium compds.; (ii)
     part (aii) an oxidizing compound such as hydrogen peroxide in water at
     acidic pH; (b) rinsing said mixture from said hair with water; and wherein
     said number of treatments is between about 2 to about 30; and wherein said
     set time interval between each two consecutive treatments is between about
     8 h and 30 days. A two part formulation of a hair dye according
    to above method is disclosed.
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
ST
    oxidative hair dye oxidant
IT
    Hair preparations
        (dyes, oxidative; method of gradual permanent coloring of
       hair)
IT
    Polyoxyalkylenes, biological studies
      Polysiloxanes, biological studies
     Quaternary ammonium compounds, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (method of gradual permanent coloring of hair)
TT
    83-56-7, 1,5-Dihydroxynaphthalene 84-87-7, 1-Naphthol-4-sulfonic acid
    87-02-5, 1-Hydroxy-6-aminonaphthalene-3-sulfonic acid 87-66-1,
    Pyrogallol 89-25-8, 1-Phenyl-3-methyl-5-pyrazolone 89-57-6,
    5-Aminosalicylic acid 89-83-8, Thymol 90-15-3, 1-Naphthol 90-52-8,
    6-Methoxy-8-aminoquinoline 92-44-4, 2,3-Dihydroxynaphthalene
    o-Aminophenol 95-70-5, :p-Toluenediamine 95-86-3, 2,4-Diaminophenol
    95-88-5, 4-Chlororesorcinol 101-54-2, N-Phenyl-p-phenylenediamine
    106-50-3, p-Phenylene diamine, biological studies 108-45-2,
    m-Phenylenediamine, biological studies 108-46-3, Resorcinol, biological
    studies 120-80-9, Catechol, biological studies 123-30-8, p-Aminophenol
              141-86-6, 2,6-Diaminopyridine 150-75-4, p-Methylaminophenol
    124-43-6
```

ΙT

RN

CN

```
533-31-3, 3,4-Methylenedioxyphenol 533-73-3, 1,2,4-Trihydro 537-65-5, 4,4'-Diaminodiphenylamine 575-38-2, 1,7-Dihydroxy 591-27-5, m-Aminophenol
533-31-3, 3,4-Methylenedioxyphenol
                                      533-73-3, 1,2,4-Trihydroxybenzene
                                       575-38-2, 1,7-Dihydroxynaphthalene
                                                                 605-37-8.
2,3-Dihydroxy-1,4-naphthoquinone 608-25-3, 2-Methylresorcinol
615-66-7, 2-Chloro-p-phenylenediamine
                                        823-40-5, 2,6-Diaminotoluene
1004-74-6, 2,4,5,6-Tetraaminopyrimidine
                                           1004-75-7, 4-Hydroxy-2,5,6-
triaminopyrimidine 1124-09-0, 2,4,5-Trihydroxytoluene
                                                            1812-53-9,
Dicetyl dimonium chloride 1953-54-4, 5-Hydroxyindole 2380-84-9, 7-Hydroxyindole 2380-86-1, 6-Hydroxyindole
                                                          2359-53-7
                                                            2835-95-2,
6-Methyl-3-aminophenol
                        2835-96-3, 2-Methyl-p-aminophenol
                                                               2835-99-6,
3-Methyl-p-aminophenol
                          3085-95-8
                                     3131-52-0, 5,6-Dihydroxyindole
3313-92-6, Sodium percarbonate
                                 4664-16-8, 2,6-Dihydroxy-4-methylpyridine
4928-43-2, 2-Dimethylamino-5-aminopyridine 5697-02-9,
1-Acetoxy-2-methylnaphthalene 6201-65-6, 2-Chlororesorcinol
                                                                  6941-70-4
7207-40-1 7218-02-2, 2,6-Dimethyl-p-phenylenediamine
                                                         7228-00-4
7469-77-4, 2-Methyl-1-naphthol 7575-35-1 7722-84-1, Hydrogen peroxide,
                    9002-89-5D, Poly(vinyl alcohol) ), quaternized
biological studies
           9003-39-8, Poly(vinylpyrrolidone)
9002-98-6
                                                9003-47-8,
Poly(vinylpyridine) 10288-36-5, 5-Hydroxy-1,4-benzodioxane
                                                                 11138-47-9,
                   14268-66-7, 3,4-Methylenedioxyaniline
Sodium perborate
                                                           14572-93-1
16867-03-1, 2-Amino-3-hydroxypyridine 19298-14-7 25154-86-3,
Poly(dimethylaminoethylmethacrylate) 25154-86-3D, Poly
(dimethylaminoethylmethacrylate), quaternized
                                                25322-68-3, Polyethylene
        26021-57-8, 6-Hydroxybenzomorpholine 26062-79-3,
Poly(dimethyldiallylammonium chloride)
                                         26062-81-7,
Poly(diallylpiperidinium chloride)
                                    26913-06-4, Poly[imino(1,2-
ethanediyl)] 29785-47-5, 2-Methoxymethyl-p-aminophenol; 39489-79-7
40771-26-4, 1,5-Dihydroxy-1,2,3,4-tetrahydronaphthalene;
                                                             42485-84-7,
2-Ethylamino-p-cresol 45514-38-3, 4,5-Diamino-1-methylpyrazole
53222-92-7, 2-Methyl-3-aminophenol 53233-89-9, 5-Chloro-2,3-
dihydroxypyridine 55302-96-0
                                60268-17-9
                                               70643-19-5,
2-(2,4-Diaminophenoxy)ethanol
                                 71500-41-9 71500-42-0
                                                            73793-80-3,
2-Hydroxymethyl-p-phenylenediamine
                                     76619-89-1, 5-Methyl-3-aminophenol
80467-77-2, N-(2-Hydroxypropyl)-p-phenylenediamine
                                                     81329-90-0
            83763-47-7 84540-47-6, 2,6-Dihydroxy-3,4-dimethylpyridine
81892-72-0
84540-48-7, 2,4-Diaminophenoxyacetic acid 8\overline{4}540-\overline{5}0-1,
2-Chloro-6-methyl-3-aminophenol
                                 85679-78-3, 3,5-Diamino-2,6-
dimethoxypyridine 86817-42-7 87582-56-7, Poly(vinylpyridinium
chloride)
            90817-34-8, 3-Amino-2-methylamino-6-methoxypyridine
                          97902-51-7 97902-52-8, 2-Isopropyl-p-
90817-35-9
             94082-77-6
phenylenediamine 104333-03-1, 3-Amino-5-hydroxy-2,6-dimethoxypyridine
104333-09-7
              104752-50-3
                            104903-49-3
                                           110102-86-8
                                                         110952-46-0
115423-86-4
              117907-42-3
                            119004-91-0
                                           129697-50-3
                                                         137290-78-9,
5-Amino-4-methoxy-2-methylphenol
                                  141614-04-2
                                                  181777-19-5
260981-02-0, N-2-Methoxyethyl-p-phenylenediamine
                                                    359866-36-7
461424-71-5
              461424-72-6 596092-84-1
                                        596092-86-3
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
   (method of gradual permanent coloring of hair)
25154-86-3, Poly(dimethylaminoethylmethacrylate)
25154-86-3D, Poly (dimethylaminoethylmethacrylate), quaternized
26062-79-3, Poly(dimethyldiallylammonium chloride)
596092-84-1
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
   (method of gradual permanent coloring of hair)
25154-86-3 HCAPLUS
2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, homopolymer
      (CA INDEX NAME)
CM
    1
```

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

RN 25154-86-3 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM1

CRN 2867-47-2 CMF C8 H15 N O2

26062-79-3 HCAPLUS RN

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$H_2C = CH - CH_2 - N + CH_2 - CH = CH_2$$

● C1-

596092-84-1 HCAPLUS RN

1-Propanaminium, N, N-diethenyl-N-propyl-, chloride, homopolymer (9CI) (CA CN INDEX NAME)

CM1

CRN 596092-83-0 CMF C10 H20 N . C1

$$\begin{array}{c|c}
\text{CH} & \text{CH}_2\\
 & \downarrow \\
 & \uparrow \\
 & \uparrow \\
 & \text{Pr} - n\\
 & \downarrow \\
 & \text{CH} & \text{CH}_2
\end{array}$$

● cl-

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RE.CNT 11
              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
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ALL CITATIONS AVAILABLE IN THE RE FORMAT L31 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN AN 2003:488547 HCAPLUS DN 139:57634 Use of nitrogen-containing polysiloxanes, polystyrene sulfonate ΤI and/or pyrrolidone as color protection agents in hair preparations ΙN Ehlert, Manuela; Hoeffkes, Horst; Hollenberg, Detlef PAHenkel Kommanditgesellschaft Auf Aktien, Germany SO Eur. Pat. Appl., 32 pp. CODEN: EPXXDW DTPatent LA German FAN.CNT 1 APPLICATION NO. DATE PATENT NO. KIND DATE ----------EP 1321131 A2 20030625 EP 2002-27905 20021213

PΙ R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK DE 10163803 A1 20030703 DE 2001-10163803 20011222 PRAI DE 2001-10163803 A 20011222

MARPAT 139:57634

- AΒ The invention concerns the use of nitrogen-containing polysiloxanes, polystyrene sulfonate and pyrrolidone as color protection agents in hair prepns.; preferred component is amodimethicone. Other ingredients are natural or synthetic cationic polymers, anionic polymers, protein hydrolyzates, cationic surfactants, and vitamins. Thus a shampoo contained (weight/weight%): Flexan 130 1.0; paraffin oil 3.0; Lanette 0 3.0; Foryl 100 0.2; Cutina CP 0.8; beeswax 0.05; PHB methylester 0.2; PHB ethylester 0.1; phenoxyethanol 0.6; Dehyquart A-CA 3.0; glucose 5.0; chamomile extract 0.6; Culminal MHPC 20.0; perfume 0.15; water to 100; pH ca. 3.5.
- ICICM A61K007-13 ICS D06P003-00
- CC 62-3 (Essential Oils and Cosmetics)
- ITOnium compounds

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (4,5-dihydro-1-methyl-2-nortallow alkyl-1-(2-tallow amidoethyl) imidazolium, Me sulfates; use of nitrogen-containing polysiloxanes , polystyrene sulfonate and/or pyrrolidone as color protection agents in hair prepns.)

ΙT Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) ([(aminoethyl)amino]propyl hydroxy, di-Me; use of nitrogen-containing polysiloxanes, polystyrene sulfonate and/or pyrrolidone as

```
color protection agents in hair prepns.)
ΤТ
     Surfactants
        (anionic; use of nitrogen-containing polysiloxanes, polystyrene
        sulfonate and/or pyrrolidone as color protection agents in hair
ΤТ
     Surfactants
        (cationic; use of nitrogen-containing polysiloxanes, polystyrene
        sulfonate and/or pyrrolidone as color protection agents in hair
        prepns.)
ΙT
     Hair preparations
        (conditioners; use of nitrogen-containing polysiloxanes,
        polystyrene sulfonate and/or pyrrolidone as color protection agents in
        hair prepns.)
IΤ
     Hair preparations
        (dyes; use of nitrogen-containing polysiloxanes,
        polystyrene sulfonate and/or pyrrolidone as color protection agents in
ΙT
     Dyes
        (fastness; use of nitrogen-containing polysiloxanes, polystyrene
        sulfonate and/or pyrrolidone as color protection agents in hair
        prepns.)
ΤТ
     Beeswax
     Fading
     Hair preparations
     Molecular weight
     Shampoos
        (use of hitrogen-containing polysiloxanes, polystyrene sulfonate
        and/or pyrrolidone as color protection agents in hair prepns.)
ΙT
     Protein hydrolyzates
     Vitamins
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (use of nitrogen-containing polysiloxanes, polystyrene sulfonate
        and/or pyrrolidone as color protection agents in hair prepns.)
     50-70-4, Sorbit, biological studies 50-99-7, D-Glucose, biological
               57-48-7, Fructose, biological studies
     studies
                                                      57-50-1, Saccharose,
                         58-85-5, Vitamin H 63-42-3, Lactose
     biological studies
                                                                  81-13-0,
     Panthenol
                112-02-7, Dehyquart A-CA
                                           115-77-5, Pentaerythritol,
     biological studies 528-50-7, Cellobiose 616-45-5, Pyrrolidone
     1406-18-4, Vitamin E 2152-
2687-96-9, Surfadone LP 300
                          2152-56-9, Arabinitol 2687-94-7, Surfadone LP 100
                                                       7643-75-6, L-Arabitol
                                 3615-41-6, Rhamnose
     9000-30-0, Guar gum 9003-39-8, Polyvinylpyrrolidone
                                                             9004-62-0,
     Hydroxyethylcellulose 9012-76-4, Chitosan 26590-05-6,
     Polyquaternium 7 32208-04-1, Dehyquart F75 40623-73-2
     50851-57-5
                 52467-63-7, Arquad 316 55008-57-6, Gafquat 755N
     58846-77-8, Plantacare 818
                                 64519-82-0, Isomalt 81859-24-7, Polymer JR
           86893-19-8, Glucamate DOE 120 89492-09-1, Flexan 130
     148093-12-3, Sepigel 305
                              188571-05-3, Gluadin WQ
                                                         212956-67-7,
     Plantacare 1200 225659-54-1, Dehyquart L 80 289471-15-4, Dow Corning
           357263-71-9, Honeyquat 50
                                       371165-12-7, Plantacare 810UP
     371165-83-2, Promois Milk-CAQ
                                    473664-54-9, Salcare SC 96
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (use of nitrogen-containing polysiloxanes, polystyrene sulfonate
        and/or pyrrolidone as color protection agents in hair
        prepns.)
IΤ
     26590-05-6, Polyquaternium 7 40623-73-2
     55008-57-6, Gafquat 755N
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (use of nitrogen-containing polysiloxanes, polystyrene sulfonate
        and/or pyrrolidone as color protection agents in hair
```

prepns.)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \stackrel{+}{\longrightarrow} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

● C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 40623-73-2 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 55008-57-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with dimethyl sulfate (9CI) (CA INDEX

CM

CRN 77-78-1 CMF C2 H6 O4 S

2 CM

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM3

CRN 2867-47-2 CMF C8 H15 N O2

CM 4

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN 2003:257773 HCAPLUS

```
138:275938
DN
ΤI
     Oxidative hair dye or hair bleach compositions containing
     sucrose fatty acid esters
ΙN
     Kojima, Atsushi; Nagai, Hideki; Tsuge, Satoshi
PΑ
     Hoyu Co., Ltd., Japan
SO
     Jpn. Kokai Tokkyo Koho, 8 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                           APPLICATION NO. DATE
                                            -----
PI JP 2003095902 A2 20030403
PRAI JP 2001-298321 20010927
                                           JP 2001-298321 20010927
     The invention relates to an oxidative hair dye or hair bleach
     composition consisting of alkali-containing 1st agent and oxidizing
agent-containing
     2nd agent for use by mixing together just before the application, wherein
     the 1st and/or 2nd agent contains (1) a sucrose fatty acid ester and (2)
     poly(dimethylmethylenepiperidinium chloride), dimethyldiallylammonium
     chloride-acrylamide copolymer and/or dimethyldiallylammonium
     chloride-acrylic acid copolymer. The hair composition of the present invention
     provides smooth and shiny hair. A hair bleach 1st agent containing ammonia
     solution (28%) 2, monoethanolamine (80%) 6, starch syrup 1.2, lanolin fatty
     acid aminopropylethyldimethylammonium ethylsulfate 0.5, polyoxyethylene
     octyl dodecyl ether 10, polyoxyethylene alkyl ethers 15, ethanol 15,
     anhydrous sodium sulfite 0.5, 0.5, ethylenediaminehydroxyethyltriacetate
     sodium salt monohydrate 0.5, fragrance q.s., and water balance to 100 %,
     and a 2nd agent containing H2O2 (35%) 17, cetanol 2, polyoxyethylene stearyl
     ether 0.4, sucrose stearate 2, dimethyldiallylammonium chloride-acrylic
     acid copolymer 0.5, dimethylpolysiloxane 1,
     stearyltrimethylammonium chloride 0.5, phenacetin 0.1, phosphoric acid
     q.s., to pH 3.5, and water balance to 100 % were formulated.
IC
     ICM A61K007-135
     ICS A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
ST
     sucrose fatty acid ester oxidative hair dye bleach
ΙT
     Hair preparations
        (bleaches; oxidative hair dye or hair bleach compns. containing
        sucrose fatty acid esters and specified polymers)
ΙT
     Hair preparations
        (dyes, oxidative; oxidative hair dye or hair bleach
        compns. containing sucrose fatty acid esters and specified polymers)
ΙT
     Fatty acids, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (esters, sucrose; oxidative hair dye or hair bleach compns.
        containing sucrose fatty acid esters and specified polymers)
    106-50-3, p-Phenylenediamine, biological studies 141-43-5, Monoethanolamine, biological studies 7664-41-7, Ammonia, biological
     studies 7722-84-1, Hydrogen peroxide, biological studies
     26062-79-3 26590-05-6, Acrylamide-
     Dimethyldiallylammonium chloride copolymer 37318-31-3, Sucrose stearate
     53694-17-0, Acrylic acid-dimethyldiallylammonium chloride
     copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oxidative hair dye or hair bleach
        compns. containing sucrose fatty acid esters and specified polymers)
ΙT
     26062-79-3 26590-05-6, Acrylamide-
     Dimethyldiallylammonium chloride copolymer 53694-17-0, Acrylic
```

acid-dimethyldiallylammonium chloride copolymer RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (oxidative hair dye or hair bleach

compns. containing sucrose fatty acid esters and specified polymers)

26062-79-3 HCAPLUS RN

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \longrightarrow \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

26590-05-6 HCAPLUS RN

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$H_2C = CH - CH_2 - N + CH_2 - CH = CH_2$$

Me

Me

Me

Me

Me

Me

Me

● cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

53694-17-0 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

L31 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:222140 HCAPLUS

DN 138:242890

TΙ Compositions and method for targeted controlled delivery of active ingredients and sensory markers onto hair, skin, and fabric

Shefer, Adi; Shefer, Samuel David ΙN

PΑ

SO U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Ser. No. 771,752. CODEN: USXXCO

DT Patent

LAEnglish

FAN.CNT 2

	PATENT NO.				KI	ND	DATE				APPLICATION NO.				DATE				
ΡI	US	US 2003053974 US 2002146379			A1		20030320			US 2002-222054				4	20020816				
	US				A1		20021010			US 2001-771752				2	20010129				
	US	US 6491902			В	2	2002	1210											
	WO	2004016232			A1		20040226			WO 2003-US22143				43	20030716				
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
															GB,				
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
			PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
			UA,	UG,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	
			ТJ,	TM															
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZM,	ZW,	AT,	ΒE,	BG,	

5/4/04

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1396260 A1 20040310 EP 2003-255007 20030813 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

PRAI US 2001-771752 A2 20010129 US 2002-222054 A 20020816

OS MARPAT 138:242890

AΒ The present invention is a controlled delivery system that can be incorporated in hair, skin, and fabric care products such as shampoos, conditioners, hair styling products, lotions, creams, liquid laundry detergents, fabric softener, and other hair, skin, and fabric care products to effectively deliver a broad range of active agents and sensory markers onto the hair, skin, and fabric. The system also prolongs the release rate of the active agents or sensory markers over an extended period of time, or provides heat triggered release of the active agents and yields a high impact fragrance "burst" upon blow drying the hair, ironing the fabric, or other types of heat treatment. The controlled delivery system of the present invention is a nano-sphere, having an average sphere diameter of from about 0.01μ to about 10μ . The nano-sphere comprises hydrophobic materials, cationic conditioning agent or, cationic conditioning agent in conjunction with a cationic charge booster to assist in adhering the spheres onto hair, skin, and fabric. The invention further relates to a controlled delivery system where the release rate of the active ingredients is synchronized with that of a sensory marker to convey to the consumer the product performance. Nanosphere delivery systems for skin were prepared comprising water 60, Retinol 10, Incroquat Behenyl HE 10, and Performa V-216 20%.

IC ICM A61K007-06

ICS A61K007-11

NCL 424070110; 424070120; 424070170

CC 62-4 (Essential Oils and Cosmetics)
Section cross-reference(s): 40

IT Analgesics

Anesthetics

Anti-inflammatory agents

Antibacterial agents

Antibiotics

Antioxidants

Preservatives

Attractants

Bath preparations

Cosmetics

Drugs

Dyes

Emulsifying agents
Fabric softeners
Fungicides
Hair preparations
Humectants
Immunomodulators
Insect repellents
Lubricants
Nutrients
Ozocerite
Particle size
Perfumes
Pigments, nonbiological

```
Radical scavengers
     Reducing agents
     Shampoos
     Skin
     Stabilizing agents
     Sunscreens
     Surfactants
     Textiles
        (compns. and method for targeted controlled delivery of active
        ingredients and sensory markers onto hair, skin, and fabric)
ΙT
     Candelilla wax
     Canola oil
     Ceramides
     Corn oil
     Elastins
     Enzymes, biological studies
     Glycerides, biological studies
     Jojoba oil
     Lard
     Mucopolysaccharides, biological studies
     Peanut oil
     Polyamides, biological studies
     Polyamines
     Polymers, biological studies
       Polysiloxanes, biological studies
     Quaternary ammonium compounds, biological studies
     Retinoids
     Safflower oil
     Soybean oil
     Sunflower oil
     Tall oil
     Vitamins
     Waxes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compns. and method for targeted controlled delivery of active
        ingredients and sensory markers onto hair, skin, and fabric)
ΙT
     Hair preparations
        (dyes; compns. and method for targeted controlled delivery of
        active ingredients and sensory markers onto hair, skin, and fabric)
     106-24-1, Geraniol 112-02-7, Cetyl trimethylammonium chloride
ΙT
                              9002-98-6 9004-61-9, Hyaluronic acid
     9002-88-4, Polyethylene
     9004-61-9D, Hyaluronic acid, salts 9010-77-9, Ethylene-acrylic
     acid copolymer 26336-38-9, Polyethyleneamine 26913-06-4,
     Poly[imino(1,2-ethanediyl)] 62229-50-9, Epidermal growth factor
     98616-25-2, Polyquaternium 24 173833-36-8, Quaternium-82
     220828-91-1
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compns. and method for targeted controlled delivery of active
        ingredients and sensory markers onto hair, skin, and fabric)
TΤ
     9010-77-9, Ethylene-acrylic acid copolymer 98616-25-2,
     Polyquaternium 24
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compns. and method for targeted controlled delivery of active
        ingredients and sensory markers onto hair, skin, and fabric)
     9010-77-9 HCAPLUS
RN
CN
     2-Propenoic acid, polymer with ethene (9CI) (CA INDEX NAME)
     CM
          1
```

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 74-85-1 CMF C2 H4

H2C= CH2

RN 98616-25-2 HCAPLUS

CN Cellulose, ether with α -[3-(dodecyldimethylammonio)-2-hydroxypropyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) chloride (9CI) (CA INDEX NAME)

CM :

CRN 169102-72-1

CMF (C2 H4 O)n C17 H38 N O2 . \times Unspecified

CM 2

CRN 168810-59-1

CMF (C2 H4 O)n C17 H38 N O2

CCI PMS

CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:196415 HCAPLUS

DN 138:226357

TI Hair bleach or **dye** compositions containing volatile alkalies, ester surfactants, and triglycerides or alcohols

IN Kojima, Atsushi; Kanda, Naoki

PA Hoyu Co., Ltd., Japan

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Jpn. Kokai Tokkyo Koho, 10 pp.
SO
     CODEN: JKXXAF
DΤ
    Patent
LA
    Japanese
FAN.CNT 1
                                        APPLICATION NO. DATE
                 KIND DATE
     PATENT NO.
    JP 2003073243
                     A2 20030312
                                          JP 2001-268389 20010905
PRAI JP 2001-268389
                           20010905
     The compns., which are used by mixing with oxidizing agents, contain
     volatile alkalies, nonionic ester surfactants, triglyceride oils and/or
     C16-25 linear alkyl alcs., H2O, and optional dyes. The compns.
     show reduced irritating odor. A hair bleach 1st agent was prepared from
aqueous
     NH3 0.70, cetanol 5.0, high-d.p. silicone 1.0, jojoba oil 3.0,
     polyoxyethylene monostearate 3.0, perfume, and H2O to 100 weight%.
     ICM A61K007-135
IC
     ICS A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
ST
     hair bleach dye volatile alkali surfactant; ester nonionic
     surfactant hair bleach dye; triglyceride oil hair bleach
     dye; linear higher alc hair bleach dye
ΙT
     Polyelectrolytes
        (amphoteric, addnl. components; hair bleaches or dyes containing
       volatile alkalies, ester surfactants, and triglyceride oils or higher
       linear alcs.)
IT
     Hair preparations
        (bleaches; hair bleaches or dyes containing volatile alkalies,
        ester surfactants, and triglyceride oils or higher linear alcs.)
ΙT
     Polvelectrolytes
        (cationic, addnl. components; hair bleaches or dyes containing
        volatile alkalies, ester surfactants, and triglyceride oils or higher
       linear alcs.)
ΙT
     Hair preparations
        (dyes; hair bleaches or dyes containing volatile
        alkalies, ester surfactants, and triglyceride oils or higher linear
ΙT
     Fats and Glyceridic oils, biological studies
     Jojoba oil
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair bleaches or dyes containing volatile alkalies, ester
        surfactants, and triglyceride oils or higher linear alcs.)
     Alcohols, biological studies
ΙT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (long-chain; hair bleaches or dyes containing volatile alkalies,
        ester surfactants, and triglyceride oils or higher linear alcs.)
ΙT
     Surfactants
        (nonionic; hair bleaches or dyes containing volatile alkalies,
        ester surfactants, and triglyceride oils or higher linear alcs.)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oils, addnl. components; hair bleaches or dyes containing
        volatile alkalies, ester surfactants, and triglyceride oils or higher
        linear alcs.)
IT
     Bases, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (volatile; hair bleaches or dyes containing volatile alkalies,
        ester surfactants, and triglyceride oils or higher linear alcs.)
     111774-28-8 147398-76-3
TΤ
```

ΙT

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (addnl. component; hair bleaches or dyes containing volatile alkalies, ester surfactants, and triglyceride oils or higher linear alcs.) 112-92-5, Stearyl alcohol 661-19-8, Behenyl alcohol 7664-41-7, Ammonia, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair bleaches or dyes containing volatile alkalies, ester surfactants, and triglyceride oils or higher linear alcs.)

ΙT 9004-99-3, Polyoxyethylene monostearate RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (surfactant; hair bleaches or dyes containing volatile alkalies,

ester surfactants, and triglyceride oils or higher linear alcs.)

ΙT 111774-28-8 147398-76-3 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (addnl. component; hair bleaches or dyes containing volatile alkalies, ester surfactants, and triglyceride oils or higher linear alcs.)

111774-28-8 HCAPLUS RN

Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-CN propen-1-aminium chloride, graft (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● Cl =

CM

CRN 9004-62-0 CMF C2 H6 O2 . x Unspecified

> CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 107-21-1 CMF C2 H6 O2 HO-CH2-CH2-OH

RN 147398-76-3 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(butylamino)ethyl ester, polymer with CN 2-hydroxypropyl 2-propenoate and N-octyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 24171-27-5 CMF C10 H19 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{n-BuNH-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

CM 2

CRN 10124-68-2 CMF C11 H21 N O

CM 3

CRN 999-61-1 CMF C6 H10 O3

L31 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:594644 HCAPLUS AN

DN 137:158996

A polymer-based controlled delivery system for hair care products ΤI

ΙN Shefer, Adi; Shefer, Shmuel David

PASalvona LLC, USA

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PΙ

PATENT NO. KIND DATE APPLICATION NO. DATE ---------WO 2002060399 A1 20020808 WO 2002-US907 20020114

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,

```
CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
              IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
              MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
              SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
              BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2002146379
                      A1
                             20021010
                                           US 2001-771752
                                                             20010129
     US 6491902
                       B2
                             20021210
     EP 1365731
                             20031203
                       A1
                                            EP 2002-701961
                                                             20020114
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2001-771752
                      Α
                             20010129
     WO 2002-US907
                       W
                             20020114
     The present invention is a controlled delivery system that can be
AΒ
     incorporated in hair care products such as shampoos, conditioners, hair
     styling products, and other hair care products to effectively deliver a
     broad range of active agents and sensory markers, such as fragrances or
     cooling agents onto the hair. The system also prolongs the release rate
     of the active agents or sensory markers over an extended period of time,
     or provides heat triggered release of the active agents and yields a high
     impact fragrance "burst" upon blow drying the hair or other types of heat
     treatment. The controlled delivery system of the present invention is a
     nanoparticle, having an average particle diameter of from about 0.01 \boldsymbol{\mu} to
     about 10 \mu. The nanoparticle comprises hydrophobic polymers and
     copolymers, cationic charge boosters in conjunction with cationic
     surface-active conditioning agents that assist in adhering the particles
     onto hair. The invention further relates to a controlled delivery system
     where the release rate of the active ingredients is synchronized with that
     of a sensory marker to convey to the consumer the product performance.
     For example, nanoparticles were prepared from 68.9% water, 15% polyethylene,
     15% fragrance, 1% Incroquat Behenyl HE, and 0.1% Lupasol PR 815. The
     nanoparticles obtained were incorporated into a hair conditioner base;
     they deposit and adhere onto hair and are not washed off during the rinse
     process.
ΙÇ
     ICM A61K007-06
     ICS A61K007-11; A61K007-08
     62-3 (Essential Oils and Cosmetics)
CC
     Hair preparations
ΙT
        (dyes; polymer-based controlled delivery system for hair care
        products)
ΙT
     Analgesics
     Anesthetics
     Anti-inflammatory agents
    Antibacterial agents
    Antibiotics
    Antioxidants
    Attractants
     Disinfectants
    Drugs
    Emulsifying agents
```

Fungicides
Heat treatment
Humectants
Immunomodulators
Nanoparticles
Nutrients

```
Odor and Odorous substances
     Particle size
     Particles
     Perfumes
     Pigments, nonbiological
     Preservatives
     Radical scavengers
     Repellents
     Shampoos
     Stabilizing agents
     Surfactants
     UV stabilizers
        (polymer-based controlled delivery system for hair care products)
IT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (wax copolymers; polymer-based controlled delivery system for hair care
        products)
     57-11-4, Stearic acid, biological studies
                                                 112-02-7, Cetyl
     trimethylammonium chloride 1406-18-4, Vitamin E 9002-88-4,
     Polyethylene
                   9002-98-6 9004-61-9, Hyaluronic acid
                                                             9004-61-9D,
     Hyaluronic acid, salts 9004-87-9, Polyoxyethylene isooctylphenyl ether
     9005-64-5, Tween 20 9010-77-9, Acrylic acid-ethylene copolymer
     9016-45-9, Polyoxyethylene nonylphenyl ether 24937-78-8, Ethylene-vinyl
     acetate copolymer 25322-68-3D, Polyethylene glycol, fatty acid esters
     and fatty alc. ethers 26336-38-9, Polyvinylamine 62229-50-9, Epidermal
     growth factor 98616-25-2, Polyquaternium 24 106392-12-5,
     Poloxamer 173833-36-8, Quaternium 82
                                             220828-91-1, Incroquat Behenyl HE
     478156-23-9D, Isooctylphenol-formaldehyde polymer, polyethoxylated
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polymer-based controlled delivery system for hair care
        products)
ΙT
     9010-77-9, Acrylic acid-ethylene copolymer 98616-25-2,
     Polyquaternium 24
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polymer-based controlled delivery system for hair care
        products)
RN
     9010-77-9 HCAPLUS
     2-Propenoic acid, polymer with ethene (9CI) (CA INDEX NAME)
CN
     CM
          1
     CRN
         79-10-7
     CMF C3 H4 O2
   0
HO-C-CH=CH2
    CM
         2
    CRN 74-85-1
    CMF C2 H4
```

 $H_2C = CH_2$

RN 98616-25-2 HCAPLUS

CN Cellulose, ether with α -[3-(dodecyldimethylammonio)-2-hydroxypropyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) chloride (9CI) (CA INDEX NAME)

CM 1

CRN 169102-72-1

CMF (C2 H4 O)n C17 H38 N O2 . \times Unspecified

CM 2

CRN 168810-59-1

CMF (C2 H4 O)n C17. H38 N O2

CCI PMS

CM 3

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:574879 HCAPLUS

DN 137:145180

TI Cosmetic composition for treating keratinous materials comprising a cationic poly(alkyl) vinyllactam polymer and a protecting or conditioning agent

IN Cottard, Francois; De La Mettrie, Roland

PA L'Oreal, Fr.

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE _____ _____ PΙ WO 2002058646 A1 20020801 WO 2002-FR251 20020122 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, FR 2820030

BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20020802 A1

FR 2001-1108

20010126

FR 2820030 В1 20030411 EP 1357884 A1 20031105

20020122 EP 2002-700360

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

20010126 PRAI FR 2001-1108 A 20020122 WO 2002-FR251 W

- The invention concerns a composition for treating keratinous materials, in ΑB particular hair, comprising, in a physiol. and in particular cosmetically acceptable medium, at least a protecting and conditioning agent, and addnl. at least a cationic poly(alkyl) vinyllactam polymer. Said combinations enable to improve deposition of the agent protecting or conditioning the keratinous materials and the cosmetic properties. A shampoo contained ethoxylated sodium lauryl sulfate 17, 30% cocoylbetaine 2.5, Polymer ACP-1234 (a quaternary ammonium acrylic polymer) 1, copra acid monoisopropanolamide 0.6, Uvinul MS40 0.1, perfume, preservatives and water q.s 100 g.
- ICM A61K007-06 IC
- 62-3 (Essential Oils and Cosmetics) CC
- ΙT Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (Me Ph; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

ΙT Polysiloxanes, biological studies

> RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (Me vinyl; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning

ΙT Polysiloxanes, biological studies

> RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (alkoxylated; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

ΙT Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (alkyl; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning

ΙT Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aryl; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning

ΙT Acrylic polymers, biological studies

Ceramides

Cyclosiloxanes

Oxides (inorganic), biological studies

Paraffin oils

Polyolefins

Polysiloxanes, biological studies

Vitamins

Waxes

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (di-Me, hydroxyalkyl Me; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

IT Polysiloxanes, biological studies

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (di-Ph; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

IΤ Hair preparations

(dyes; cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)

- 69-72-7D, Salicylic acid, salts 76-22-2D, Camphor, derivs. ΙT Acrylic acid, di Ph derivs. 88-12-0D, polymers with cocoalkylammonium dimethylaminopropylmethacrylamides 95-14-7D, 1H-Benzotriazole, sulfonic 118-60-5, Octyl salicylate 118-92-3D, Anthranilic acid, salts 119-61-9D, Benzophenone, sulfonic derivs. 120-46-7D, Dibenzoylmethane, derivs. 131-57-7, 2-Hydroxy-4-methoxybenzophenone 150-13-0D, p-Aminobenzoic acid, salts 271-89-6D, Benzofuran, derivs. 273-53-0D, Benzoxazole, sulfonic derivs. 290-87-9D, 1,3,5-Triazine, hydroxyphenyl derivs. 621-82-9D, Cinnamic acid, esters 4065-45-6, Uvinul ms 40 4122-04-7D, Aminotriazine, dialkyl derivs. reaction product with 5205-93-6D, cocoalkylammonium derivs., polymers with resorcinol vinylpyrrolidone and dimethylaminopropylmethacrylamide 5466-77-3, 2-Ethylhexyl 4-methoxycinnamate 6197-30-4, Octocrylene 7400-08-0D. p-Hydroxycinnamic acid, salts 9000-30-0, Guar gum 9000-30-0D, Guar gum, reaction products with epoxypropyltrimethylammonium 9003-28-5, Polybutene 9003-28-5D, Polybutene, hydrogenated 9003-29-6, Polybutene 9003-29-6D, Polybutene, hydrogenated 9003-39-8D, Polyvinylpyrrolidone, quaternary ammonium derivs. 9004-34-6D, Cellulose, quaternary derivs. 9004-62-0D, Hydroxyethyl cellulose, reaction products with epoxides 9004-82-4, Ethoxylated sodium lauryl sulfate 9016-00-6, Polydimethylsiloxane 11138-66-2, Xanthan gum 15087-24-8D. Benzylidene camphor, sulfonic derivs. 17301-53-0, Behenyltrimethylammonium chloride 26590-05-6, Acrylamide-Diallyldimethylammonium chloride copolymer 27538-35-8, Ethyl urocanate 28791-69-7 29383-23-1D, Vinylimidazole, polymers 31900-57-9, Polydimethylsiloxane 34227-83-3 34354-88-6 37309-58-3, Polydecene 37309-58-3D, Polydecene, hydrogenated 54482-09-6 87246-72-8 96673-02-8 110483-07-3 129426-19-3 144653-38-3 144653-39-4 149591-38-8 150177-00-7 155633-54-8 245654-94-8 **306769-69-7 306769-73-3** 444572-28-5, ACP 1234 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)
- 26590-05-6, Acrylamide-Diallyldimethylammonium chloride copolymer IΤ 306769-69-7 306769-73-3
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (cosmetic composition for treating keratinous materials comprising cationic poly(alkyl) vinyllactam polymer and protecting or conditioning agent)
- RN 26590-05-6 HCAPLUS
- 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM 1 CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 306769-69-7 HCAPLUS 1-Dodecanaminium, N,N-dimethyl-N-[3-[$\langle 2-methyl-1-oxo-2-methyl-1$ CN propenyl)amino]propyl]-, salt with 4-methylbenzenesulfonic acid (1:1),

polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 5205-93-6

CMF C9 H18 N2 O

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N}- \text{(CH}_2)} & 3- \text{NH}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 2

CRN 88-12-0 CMF C6 H9 N O

CM 3

306769-68-6 CRN

C21 H43 N2 O . C7 H7 O3 S CMF

CM

CRN 129684-48-6

CMF C21 H43 N2 O

5 CM

CRN 16722-51-3

CMF C7 H7 O3 S

CN

RN 306769-73-3 HCAPLUS

1-Dodecanaminium, N, N-dimethyl-N-[3-[(2-methyl-1-oxo-2propenyl)amino]propyl]-, chloride, polymer with N-[3-(dimethylamino)propyl]-2-methyl-2-propenamide and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM1

CRN 126758-30-3

CMF C21 H43 N2 O . C1

Cl-

CM2 CRN 5205-93-6 CMF C9 H18 N2 O

$$\begin{array}{c} \text{O} \quad \text{CH}_2 \\ || \quad || \\ \text{Me}_2 \text{N} - \text{(CH}_2)} \\ \text{3} - \text{NH} - \text{C} - \text{C} - \text{Me} \end{array}$$

CM 3

CRN 88-12-0 CMF C6 H9 N O

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:553059 HCAPLUS

DN 137:98675

TI Hair **dye** composition comprising direct **dyes**, quaternary ammonium compounds, and cationic polymers

IN Grit, Mustafa

PA Goldwell Gmbh, Germany

SO Eur. Pat. Appl., 11 pp.

CODEN: EPXXDW

DT Patent

LA German

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE --------------PΙ EP 1224927 A1 20020724 EP 2002-1025 20020117 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR DE 10101946 A1 20020801 DE 2001-10101946 20010117 JP 2002249419 A2 20020906 JP 2002-5607 20020115 PRAI DE 2001-10101946 A 20010117

The invention concerns hair dyes that contain direct dyes, long-chain quaternary ammonium compds., cationic polymers, nonionic, amphoteric or zwitterionic polymers, ethanol, propanol or isopropanol and water. The dyes are packaged in a transparent container. Thus a dye contained (weight/weight%): dimethicone copolyol 1.50; cetrimonium chloride 0.80; ethanol 15.00; polyvinylpyrrolidone 0.50; propylene carbonate 15.00; lactic acid (90%) 5.00; sodium hydroxide (32%) 0.20; polyquaternium 6 0.60; quaternary dimethylaminoethylmethacrylate homopolymer 3.50; Acid Orange 7 0.15; Acid Yellow 3 0.10; Acid Violet 43 0.25; water to 100.

IC ICM A61K007-13

CC 62-4 (Essential Oils and Cosmetics)

```
ST
     direct hair dye compn quaternary ammonium compd cationic polymer
ΙT
     Polyelectrolytes
        (amphoteric; hair dye composition comprising direct dyes
        , quaternary ammonium compds., and cationic polymers)
ΙT
     Polyelectrolytes
        (cationic; hair dye composition comprising direct dyes,
        quaternary ammonium compds., and cationic polymers)
ΙT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, Me hydrogen polysiloxane-; hair dye composition
        comprising direct dyes, quaternary ammonium compds., and
        cationic polymers)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, Me hydrogen, polyoxyalkylene-; hair dye composition
        comprising direct dyes, quaternary ammonium compds., and
        cationic polymers)
ΙT
     Dyes
        (direct; hair dye composition comprising direct dyes,
        quaternary ammonium compds., and cationic polymers)
ΙT
     Hair preparations
        (dyes; hair dye composition comprising direct
        dyes, quaternary ammonium compds., and cationic polymers)
ΙT
     Transparency
     Viscosity
        (hair dye composition comprising direct dyes, quaternary
        ammonium compds., and cationic polymers)
ΙT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dye composition comprising direct dyes, quaternary
        ammonium compds., and cationic polymers)
ΙT
     Quaternary ammonium compounds, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (long-chain; hair dye composition comprising direct dyes
        , quaternary ammonium compds., and cationic polymers)
ΙT
     Polyelectrolytes
        (zwitterionic; hair dye composition comprising direct dyes
         quaternary ammonium compds., and cationic polymers)
     64-17-5, Ethanol, biological studies 67-63-0, Isopropanol, biological
     studies 71-23-8, Propanol, biological studies 108-32-7, Propylene
     carbonate 112-02-7, Cetrimonium chloride 112-03-8, Stearyltrimethyl
     ammonium chloride 632-99-5, Basic Violet 14 633-96-5, Acid Orange 7
     2784-89-6, HC-Red 1 4065-45-6, Benzophenone-4 4430-18-6, Acid Violet
          8004-92-0, Acid Yellow 3 9003-39-8, Polyvinylpyrrolidone
     25086-89-9, Vinylacetate-vinylpyrrolidone copolymer 26062-79-3,
     Polyquaternium 6 26161-33-1 26381-41-9, Basic Brown 16
     68123-13-7, Basic Blue 99 68391-30-0, Basic Red 76
                                                            68391-31-1, Basic
     Yellow 57 81859-24-7, Polyquaternium-10 92183-41-0,
     Polyquaternium-4 473664-54-9, Salcare SC 96
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dye composition comprising direct dyes,
        quaternary ammonium compds., and cationic polymers)
ΙT
     26062-79-3, Polyquaternium 6 26161-33-1
     92183-41-0, Polyquaternium-4
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dye composition comprising direct dyes,
        quaternary ammonium compds., and cationic polymers)
     26062-79-3 HCAPLUS
RN
CN
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer
```

ELHILO 10/691427 5/4/04 Page 60

(9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \mid \\ \downarrow \\ \text{CH-CH}_2 - \underbrace{\text{N+-CH}_2 - \text{CH----}}_{\text{Me}} \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

• c1-

RN 26161-33-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . Cl

● c1-

RN 92183-41-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-propen-l-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \xrightarrow{==} \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● C1-

```
CM
         2
    CRN 9004-62-0
    CMF C2 H6 O2 . x Unspecified
         CM
              3
         CRN
             9004-34-6
         CMF
              Unspecified
         CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
         CM
              4
         CRN 107-21-1
         CMF C2 H6 O2
HO- CH2- CH2- OH
RE.CNT 5
             THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L31 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN
AΝ
    2002:521427 HCAPLUS
DN
    137:83391
TΙ
    Cosmetic hair compositions containing a polyether block silicone and a
    polyether silicone and
ΙN
    Maubru, Mireille; Beauquey, Bernard; Thomas, Beatrice
PΑ
    L'Oreal, Fr.
    PCT Int. Appl., 41 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    French
FAN.CNT 1
                   KIND DATE
                                        APPLICATION NO. DATE
     -----
                                         ______
    WO 2002053111 A2 20020711
WO 2002053111 A3 20031009
PΙ
                                         WO 2001-FR4120 20011220
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
            UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    FR 2818901
                     A1
                           20020705
                                         FR 2001-7
                                                        20010102
    FR 2818901
                      В1
                           20040123
PRAI FR 2001-7
                          20010102
                      A
    The invention concerns novel cosmetic compns. comprising in a cosmetically
    acceptable medium at least a silicone comprising at least a terminal or
    pendant monovalent polyoxyalkylene group and at least an (AB)n type
```

```
silicone, A being a block polysiloxane and B a polyoxyalkylene
     block and n being not less than 2. Said combination provides enhanced
     cosmetic properties (lightness, combing, volume, luster). Said compns. are
     used in particular for washing and/or conditioning keratinous materials
     such as the hair or the skin. A shampoo contained ethoxylated sodium
     lauryl sulfate 14, Miranol C2M 3.6, Jaguar C13A 0.04, polyoxyethylene
     polydimethylsiloxane 3, polyethylene glycol distearate 1, citric
     acid q.s. pH = 6.5, perfume, preservatives, and water q.s. 100 q.
ΙC
     ICM A61K007-06
     ICS A61K007-48; C11D003-37; A61K007-50; C08J003-00
CC
     62-3 (Essential Oils and Cosmetics)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, polyoxyethylene-polyoxypropylene-; cosmetic hair compns. containing
        polyether block silicone and polyether silicone and)
ΙT
     Hair preparations
        (dyes; cosmetic hair compns. containing polyether block silicone
        and polyether silicone and)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polyether-; cosmetic hair compns. containing polyether block silicone and
        polyether silicone and)
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polyoxyalkylene-; cosmetic hair compns. containing polyether block
        silicone and polyether silicone and)
ΙT
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polysiloxane-; cosmetic hair compns. containing polyether block
        silicone and polyether silicone and)
IT
     Polyethers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (siloxane-; cosmetic hair compns. containing polyether block
        silicone and polyether silicone and)
     81-13-0, Panthenol
                         9004-34-6D, Cellulose, quaternary derivs.
IT
     9004-62-0D, Hydroxyethyl cellulose, trimethylammonium derivs.
     28301-34-0, PolyDiallyldimethylammonium 29297-55-0, Vinyl
     imidazole-vinylpyrrolidone copolymer
                                           36332-93-1, Methyl-18 eicosanoic
            48042-45-1D, Diallyldimethylammonium, polymers 65497-29-2, Jaquar
     C13s 96525-76-7, Acrylamide-diallyldimethylammonium copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic hair compns. containing polyether block silicone and
        polyether silicone and)
ΙT
     28301-34-0, PolyDiallyldimethylammonium 96525-76-7,
     Acrylamide-diallyldimethylammonium copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic hair compns. containing polyether block silicone and
        polyether silicone and)
RN
     28301-34-0 HCAPLUS
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, homopolymer (9CI) (CA
CN
     INDEX NAME)
     CM
          1
     CRN 48042-45-1
     CMF C8 H16 N
```

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

96525-76-7 HCAPLUS RN

2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, polymer with 2-propenamide CN (9CI) (CA INDEX NAME)

CM 1

CRN 48042-45-1 CMF C8 H16 N

$$\begin{array}{c} \text{Me} \\ | \\ \text{H}_2\text{C} &= \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

CM 2

CRN 79-06-1 CMF C3 H5 N O

L31 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:482634 HCAPLUS

DN 137:51990

Acidic hair dye compositions containing anionic and cationic polymers and surfactants

IN Ochiai, Masatoshi; Suzuki, Kazunobu

PΑ Shiseido Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

KIND DATE APPLICATION NO. DATE ----------JP 2002179538 A2 20020626 JP 2000-374681 20001208 PRAI JP 2000-374681 20001208

The invention relates to an acidic hair dye composition providing improved hair touch after the hair-dyeing treatment, wherein the composition contains anionic polymer 0.01-5, cationic polymer 0.01-15, anionic surfactant and/or nonionic surfactant 0.01-5 %. An acidic hair dye composition containing carboxyvinyl polymer 0. 01, Japan orange 205

0.01, Japan red 227 0.1, Japan black 401 0.05, Japan purple 401 0.01, Japan yellow 4 0.1, 1,3-butylene glycol 15, benzyl alc. 5, hydroxyethyl cellulose 1.5, fragrance 0.5, stearyltrimethylammonium chloride 0.1, a cationic polymer (Merquat 550) 2.5, polyoxyethylene oleyl ether (Emalex 550-P) 0.5, α -olefinsulfonate 1, methylpolysiloxane 2, amino-modified silicone 0.1, soybean extract 0.1, wild oat extract 0.1, NaOH 0.02, and water balance to 100 $\frac{1}{8}$ was prepared ICM A61K007-13 IC СC 62-3 (Essential Oils and Cosmetics) anionic cationic polymer surfactant acidic hair dye; STcarboxyvinyl polymer dimethyldiallylammonium chloride acrylamide copolymer hair **dye** ΙT Polysiloxanes, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye compns. containing anionic and cationic polymers and surfactants) Sulfonic acids, biological studies IT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (alkene; acidic hair dye compns. containing anionic and cationic polymers and surfactants) ΙT Vinyl compounds, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (carboxy-containing, polymers; acidic hair dye compns. containing anionic and cationic polymers and surfactants) Hair preparations ΙT (dyes; acidic hair dye compns. containing anionic and cationic polymers and surfactants) ΙT 9004-98-2, Polyoxyethylene oleyl ether RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (Emalex 550P; acidic hair dye compns. containing anionic and cationic polymers and surfactants) 9003-01-4, Polyacrylic acid 26062-79-3, Merquat 100 ΙT **26590-05-6**, Merquat 550 42557-10-8 **53633-54-8**, Gafquat 81859-24-7, Polymer JR-400 158465-66-8D, methoxydimethylsilylterminated RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye compns. containing anionic and cationic polymers and surfactants) 9003-01-4, Polyacrylic acid 26062-79-3, Merquat 100 IT 26590-05-6, Merquat 550 53633-54-8, Gafquat 755 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye compns. containing anionic and cationic polymers and surfactants) 9003-01-4 HCAPLUS RN2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME) CN CM 1 CRN 79-10-7 CMF C3 H4 O2

0 HO-C-CH=CH2

26062-79-3 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer CN

ELHILO 10/691427 5/4/04 Page 65

(9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● C1-

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{array}{c} \text{O} \\ || \\ \text{H}_2 \text{N} - \text{C} - \text{CH} = \text{CH}_2 \end{array}$$

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) x

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 13 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:465766 HCAPLUS AN

DN 137:51984

ΤI Hair conditioning compositions containing polysiloxanes and their use in hair coloring compositions

IN Hammond, Roger Clive; Jones, Stevan David; Geary, Nicholas William

PΑ The Procter & Gamble Company, USA

SO PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DТ Patent

LA English

FAN.CNT 2

PATENT NO. KIND DATE APPLICATION NO. DATE ----------ΡI WO 2002047632 A2 20020620 WO 2001-US48600 20011207

```
WO 2002047632
                      АЗ
                            20030206
         W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES,
             FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL,
             TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2002030903
                       Α5
                            20020624
                                           AU 2002-30903
                                                             20011207
     EP 1341502
                       Α2
                            20030910
                                            EP 2001-991160
                                                             20011207
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2003219399
                      A1
                            20031127
                                            US 2003-460068
                                                             20030612
PRAI GB 2000-30369
                       Α
                            20001213
     GB 2001-20048
                       Α
                            20010816
     WO 2001-US48600
                      W
                            20011207
AB
     The present invention relates to a hair care composition comprising an
     aminofunctional polysiloxane (0.1-10%) having a specified average
     effective particle size (10-30 \mu m) which provides improved durable
     conditioning, particularly when utilized in conjunction with a hair
     coloring composition
IC
     ICM A61K007-06
CC
     62-3 (Essential Oils and Cosmetics)
ST
     polysiloxane hair conditioner oxidative dye
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me, Q 2-8220; hair
        conditioning compns. containing aminofunctional polysiloxanes and
        their use in hair coloring compns.)
ΙT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C16-18, ethoxylated, ceteareth 25; hair conditioning compns. containing
        aminofunctional polysiloxanes and their use in hair coloring
        compns.)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (amino-containing; hair conditioning compns. containing aminofunctional
        polysiloxanes and their use in hair coloring compns.)
ΙT
     Polyelectrolytes
        (cationic; hair conditioning compns. containing aminofunctional
        polysiloxanes and their use in hair coloring compns.)
ΙT
    Hair preparations
        (conditioners; hair conditioning compns. containing aminofunctional
       polysiloxanes and their use in hair coloring compns.)
TΥ
    Hair preparations
        (dyes, oxidative; hair conditioning compns. containing
        aminofunctional polysiloxanes and their use in hair coloring
        compns.)
ΙT
    Hair
    Particle size
    Surfactants
        (hair conditioning compns. containing aminofunctional polysiloxanes
       and their use in hair coloring compns.)
    Human
        (hair; hair conditioning compns. containing aminofunctional
       polysiloxanes and their use in hair coloring compns.)
```

ΙT

106-50-3, p-Phenylenediamine, biological studies 108-46-3, Resorcinol, biological studies 123-30-8, p-Aminophenol 150-75-4, p-Methylaminophenol 591-27-5, m-Aminophenol 608-25-3, 2-Methyl 1321-67-1, Naphthol 2835-95-2, 4-Amino-2-hydroxytoluene resorcinol 6369-59-1 7722-84-1, Hydrogen peroxide, biological studies 16867-03-1, 25723-55-1, m-Phenylenediamine-sulfate 2-Amino-3-Hydroxypyridine 26062-79-3, Polyquaternium 6 26590-05-6, Polyquaternium 7 **53633-54-8**, Polyquaternium 11 55302-96-0 58262-44-5 65497-29-2, Guar hydroxypropyltrimonium chloride 81859-24-7, Polyquaternium 10 95144-24-4, Polyquaternium 16 98616-25-2, Quatrisoft LM 200 164919-03-3 437984-38-8, SF 1923 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair conditioning compns. containing polysiloxanes in hair coloring compns.)

IT 26062-79-3, Polyquaternium 6 26590-05-6, Polyquaternium
7 53633-54-8, Polyquaternium 11 98616-25-2, Quatrisoft
LM 200

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair conditioning compns. containing polysiloxanes in
 hair coloring compns.)

RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

● Cl -

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O)x

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 - \text{CH}_2 - \text{O-C-C-Me} \end{array}$$

CM4

CRN 88-12-0 CMF C6 H9 N O

98616-25-2 HCAPLUS RN

Cellulose, ether with α -[3-(dodecyldimethylammonio)-2-hydroxypropyl]-CN w-hydroxypoly(oxy-1,2-ethanediyl) chloride (9CI) (CA INDEX NAME)

CM 1

CRN 169102-72-1

(C2 H4 O)n C17 H38 N O2 . x Unspecified CMF

> CM2

CRN 168810-59-1

CMF (C2 H4 O)n C17 H38 N O2

CCI PMS

3 CM

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L31 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:449457 HCAPLUS

DN 137:24122

ΤI Hair formulations containing phospholipids and proteins

Poppe, Elisabeth; Weser, Gabriele ΙN

PAHans Schwarzkopf Gmbh & Co. Kg, Germany

SO PCT Int. Appl., 77 pp.

CODEN: PIXXD2 DT Patent LA German FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ----- ----PΙ WO 2002045664 A1 20020613 WO 2001-EP13922 20011128 W: AU, JP, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR DE 10060814 A1 20020613 DE 2000-10060814 20001207 AU 2002017064 Α5 20020618 AU 2002-17064 20011128 PRAI DE 2000-10060814 A 20001207 WO 2001-EP13922 W 20011128 OS MARPAT 137:24122 AB The invention relates to a novel use of phospholipids which significantly improves the restructuring of fibers, especially keratin fibers, and the fastness of keratin fibers. Thus, a hair spray contained Eumulgin B2 0.3, cetylstearyl alc. 3.3, iso-Pr myristate 0.5, Lamesoft PO65 0.5, Dehyquart A-CA 2.0, Salcare SC-96 1.0, citric acid 0.4, Gluadin WQ 2.0, pyridoxine 1.0, linoleamideopropyl PG-dimonium chloride phosphate 0.7, Phenonip 0.8, and water to 100%. ICM A61K007-06 IC ICS A61K007-13 CC 62-3 (Essential Oils and Cosmetics) ΙT Hair preparations (dyes, oxidative; hair formulations containing phospholipids and proteins) ΙT Hair preparations (dyes; hair formulations containing phospholipids and proteins) ΙT Phospholipids, biological studies Polymers, biological studies Polyoxyalkylenes, biological studies Polysiloxanes, biological studies Protein hydrolyzates RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair formulations containing phospholipids and proteins) 99-96-7D, Benzoic acid, p-hydroxy-, esters 107-64-2, Genamin DSAC TΤ 111-60-4, Cutina EGMS 112-02-7, Dehyquart ACA 627-83-8, Cutina AGS 2809-21-4, Turpinal SL 5333-42-6, Eutanol G 8066-38-4, Phenonip 9003-39-8, Luviskol K30 9004-62-0, Natrosol 250HR 9004-82-4, Texapo 9004-82-4, Texapon 9012-76-4, Hydagen HCMF 26161-33-1 26590-05-6, Merquat 550 28874-51-3, Ajidew NL50 30351-73-6, Latekoll D 32208-04-1, Dehyquart F75 33939-64-9, Akypo RLM 45NV 42557-10-8, Dow Corning 200 52467-63-7, Arquad 316 55008-57-6, Gafquat 755N 55406-53-6, Biodocarb 65497-29-2, Cosmedia guar C261 67167-17-3, Antil 81859-24-7, Polymer JR 400 86893-19-8, Glucamate DOE 120 92183-41-0, Celquat L200 102961-94-4, Dehyton G 144377-73-1, Phospholipid EFA 145686-74-4, Dow Corning Q2-5220 148093-12-3, Sepigel 155808-76-7, Euperlan PK 3000 158191-47-0, Texapon K 14S 170137-14-1, Phospholipid PTC 188571-05-3, Gluadin WQ 194797-12-1, Amisafe LMA-60 202833-50-9, Lamesoft PO 65 213190-84-2, Plantacare 217087-75-7, Plantacare 818UP 225659-54-1, Dehyquart L80 241128-65-4, Phospholipid SV 357263-71-9, Honeyquat 50 371165-12-7, Plantacare 810UP 371165-83-2, Promois Milk-CAQ 371166-06-2, Gluadin 371167-19-0, Cutina KD 16 473664-54-9, Salcare SC 96 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair formulations containing phospholipids and proteins) ΤT 26161-33-1 26590-05-6, Merquat 550 30351-73-6,

5/4/04

Latekoll D 55008-57-6, Gafquat 755N 92183-41-0,

Celquat L200

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair formulations containing phospholipids and proteins)

26161-33-1 HCAPLUS

Ethanaminium, N, N, N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, CN chloride, homopolymer (9CI) (CA INDEX NAME)

CM

RN

CRN 5039-78-1

CMF C9 H18 N O2 . C1

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_3 + \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

● cl-

26590-05-6 HCAPLUS RN

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \mid \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 30351-73-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{EtO-C-CH-----} \text{CH}_2 \end{array}$$

CM 2

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 55008-57-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with dimethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 77-78-1 CMF C2 H6 O4 S

CM 2

CRN 30581-59-0

ELHILO 10/691427 5/4/04 Page 74

CMF (C8 H15 N O2 . C6 H9 N O) \times CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

RN 92183-41-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether, polymer with N, N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 9004-62-0

CMF C2 H6 O2 . x Unspecified

CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 107-21-1 CMF C2 H6 O2

но-сн2-сн2-он

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 15 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:428663 HCAPLUS

DN 137:24137

TI Cosmetic and hair formulations containing polymers

IN Loeffler, Matthias; Morschhaeuser, Roman; Glauder, Jan

PA Clariant Gmbh, Germany

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 16

t MM.	○TA T	Τ Ω																	
	PATENT NO.				KIND		DATE			A	APPLICATION NO.					DATE			
								-											
PI -	WO 2002043677 WO 2002043677					2002	0606		WC	WO 2001-EP13862				20011128					
						20020822													
		W:	BR,	US															
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	
			PT,	SE,	TR														
	DE	1005	9827		A.	1	2002	0620		DE	200	00-1	00598	327	2000	1201			
	JΡ	JP 2002265336				20020918 20030924			JP 2001-295995 20010927										
	ΕP	P 1345575							ΕE	200	01-98	89524	4	2001	1128				
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	FI,	CY,	TR													
	BR	2001	0158	45	Α		2003	1007		BF	200	01-1	5845		2001	1128			
DDAT	DE	2000	_100!	5000	7 7		2000	1201											

PRAI DE 2000-10059827 A 20001201 WO 2001-EP13862 W 20011128

AB The invention relates to cosmetic and dermatol. hair-treatment agents that contain at least one copolymer, obtainable by radical copolymn. of acryloyldimethyl taurine acid and/or acryloyldimethyl taurates, optionally one or more other unsatd., no-cationic comonomers, optionally 1 or more unsatd., cationic comonomers, 1 or more silicone-containing component(s), and 1 or more fluorine-containing component(s). Thus, a formulation contained Genaminox CSL 6.0, Cetiol HE 2.0, acrylamidopropyl-2-methyl-2-sulfonic acid-trimethylolpropane triacrylate copolymer 1.2, and water to 100%.

IC ICM A61K007-06

CC 62-4 (Essential Oils and Cosmetics)

IT Antioxidants

Cosmetics

Dispersing agents

Dyes

Egg white

Emulsifying agents

Hair preparations

```
Pearly materials
     Perfumes
     Photoprotectants
     Preservatives
     Stabilizing agents
     Sunscreens
     Thickening agents
        (cosmetic and hair formulations containing polymers)
IT
     Enzymes, biological studies
     Lanolin
     Lecithins
     Peptides, biological studies
     Polymers, biological studies
     Polyoxyalkylenes, biological studies
       Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (cosmetic and hair formulations containing polymers)
IT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
     study); USES (Uses)
        (di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene
        glycol acetate; cosmetic and hair formulations containing polymers)
     2867-47-2DP, Dimethylaminoethylmethacrylate, polymers
IT
                                                            5039-78-1DP,
     polymers 44992-01-0DP, polymers 45708-78-9DP, polymers
                                                                 48103-10-2DP,
                69174-85-2DP, polymers
                                         74443-97-3DP, polymers
     polymers
                                                                  76847-89-7DP.
     Dimethylaminopropylmethacrylate, polymers 144306-59-2P
     201338-09-2P
                   409334-38-9DP, polymers 433922-59-9P
     433922-71-5P 433922-72-6P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (cosmetic and hair formulations containing polymers)
     144306-59-2P 201338-09-2P 433922-59-9P
     433922-71-5P 433922-72-6P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (cosmetic and hair formulations containing polymers)
RN
     144306-59-2 HCAPLUS
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with
CN
     2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA
     INDEX NAME)
     CM
          1
     CRN 15214-89-8
     CMF C7 H13 N O4 S
   NH-C-CH=CH_2
Me-C-CH2-SO3H
```

CM 2

Me

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● c1-

RN 201338-09-2 HCAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5 CMF C15 H20 O6

CM 2

CRN 15214-89-8 CMF C7 H13 N O4 S

RN 433922-59-9 HCAPLUS

CN 2-Propenoic acid, 3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 17527-29-6

CMF C11 H7 F13 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{F}_{3}\text{C--} (\text{CF}_{2})_{5}\text{--} \text{CH}_{2}\text{--} \text{CH}_{2}\text{--} \text{O--} \text{C--} \text{CH} \end{array}$$

CM 2

CRN 15214-89-8 CMF C7 H13 N O4 S

RN 433922-71-5 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

CM 2

CRN 96-05-9 CMF C7 H10 O2

RN 433922-72-6 HCAPLUS
CN Pyridinium, 4-ethenyl-1-methyl-, chloride, polymer with
2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI) (CA

ELHILO 10/691427 5/4/04 Page 79

INDEX NAME)

CM 1

CRN 45708-78-9 CMF C8 H10 N . Cl

• cl-

CM 2

CRN 15214-89-8 CMF C7 H13 N O4 S

L31 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:391480 HCAPLUS

DN 136:390756

TI Composition for treating keratinous materials comprising a cationic associative polyurethane polymer and a protecting or conditioning agent

IN Cottard, Francois; De la Mettrie, Roland

PA L'Oreal, Fr.

SO PCT Int. Appl., 76 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002039964 A1 20020523 WO 2001-FR3426 20011106

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,

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PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
             UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     FR 2816834
                       Α1
                            20020524
                                           FR 2000-14949
                                                             20001120
     AU 2002023756
                       Α5
                            20020527
                                           AU 2002-23756
                                                             20011106
     EP 1337230
                       Α1
                            20030827
                                           EP 2001-996351
                                                            20011106
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                            20030916
                                           BR 2001-15665
                      Α
                                                             20011106
     US 2004037796
                       A1
                            20040226
                                           US 2003-432038
                                                            20030519
PRAI FR 2000-14949
                       Α
                            20001120
                            20011106
     WO 2001-FR3426
                       W
     The invention concerns a composition for treating keratinous fibers, in
AB
     particular human keratinous fibers such as hair, comprising in a physiol.
     acceptable medium, at least a protecting or conditioning agent, and
     further at least a cationic associative polyurethane polymer.
     invention also concerns dyeing methods and devices using said
     composition A shampoo contained ethoxylated sodium lauryl sulfate 17, 30%
     cocoylbetaine 2.5, cationic polymer 1.0, copra acid monisiopropanolamide
     2-hydroxy-4-methoxybenzophenone-5-sulfonic acid, perfume and preservatives
     q.s., and water q.s. 100 q.
IC
     ICM A61K007-06
     ICS A61K007-42
     62-4 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 38
ST
     hair dye direct dye cationic polyurethane
TΤ
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Me hydrogen; composition for treating keratinous materials comprising
        cationic associative polyurethane polymer and protecting or
        conditioning agent)
ΤТ
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Me vinyl; composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
IΤ
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl aryl; composition for treating keratinous materials comprising
        cationic associative polyurethane polymer and protecting or
        conditioning agent)
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl; composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
ΙT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (aryl; composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
ΙT
     Ceramides
       Cyclosiloxanes
     Fatty acids, biological studies
     Paraffin oils
     Polyolefins
       Polysiloxanes, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (composition for treating keratinous materials comprising cationic
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5/4/04

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associative polyurethane polymer and protecting or conditioning agent)
IΤ
     Cyclosiloxanes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me; composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
IT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Ph, Me Ph, methoxy-terminated; composition for treating keratinous
        materials comprising cationic associative polyurethane polymer and
        protecting or conditioning agent)
ΙT
     Hair preparations
        (dyes, oxidative; composition for treating keratinous materials
        comprising cationic associative polyurethane polymer and protecting or
        conditioning agent)
ΙT
     Hair preparations
        (dyes; composition for treating keratinous materials comprising
        cationic associative polyurethane polymer and protecting or
        conditioning agent)
     69-72-7, Salicylic acid, biological studies
IT
                                                 69-72-7D, Salicylic acid,
             76-22-2D, Camphor, derivs. 79-10-7D, Acrylic acid, di-Ph derivs.
     118-60-5, Octyl salicylate 118-92-3, Anthranilic acid
                                                              119-61-9D,
     Benzophenone, derivs. 120-46-7D, Dibenzoylmethane, derivs.
                                                                   131-57-7.
     2-Hydroxy-4-methoxybenzophenone 150-13-0D, derivs.
                                                            271-89-6D,
     Benzofuran, derivs. 273-53-0D, Benzoxazole, derivs.
                                                             290-87-9D,
     1,3,5-Triazine, hydroxyphenyl derivs.
                                            4065-45-6, Uvinul ms 40
     5466-77-3, 2-Ethylhexyl 4-methoxycinnamate 6197-30-4, Octocrylene
     9000-30-0D, Guar gum, derivs. 9000-30-0D, Guar gum, reaction products
     with epoxypropyltrimethylammonium 9003-28-5, Polybutene
                                                                 9003-39-8D,
     Polyvinylpyrrolidone, quaternary
                                        9004-34-6D, Cellulose, derivs.
                                       9004-62-0D, Hydroxyethyl cellulose,
     9004-62-0, Hydroxyethyl cellulose
     reaction products with epoxide compds.
                                              9016-00-6, Polydimethyl
               15087-24-8D, Benzylidene camphor, derivs.
     25232-42-2D, Polyvinylimidazole, quaternary
                                                  25429-38-3, Hydroxycinnamic
            25429-38-3D, Hydroxycinnamic acid, salts 26062-79-3,
     Diallyldimethylammonium chloride homopolymer 26590-05-6,
     Acrylamide-diallyldimethylammonium chloride copolymer 27538-35-8D,
     Urocanic acid ethyl ester, derivs.
                                        28791-69-7
                                                       31900-57-9, Polydimethyl
     siloxane
                34354-88-6
                            37309-58-3, Polydecene
                                                      45633-15-6D,
                                             54422-45-6
     salts, reaction products with quar qum
                                                           70356-09-1,
     4-Tert-Butyl 4'-methoxydibenzoylmethane
                                             96673-02-8
                                                           110483-07-3
     129426-19-3
                  149591-38-8
                                150177-00-7
                                               160065-31-6
                                                            191226-60-5D.
     derivs.
               206052-70-2
                           245654-94-8
                                          426835-76-9
                                                       426835-77-0
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
ΤТ
     26062-79-3, Diallyldimethylammonium chloride homopolymer
     26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (composition for treating keratinous materials comprising cationic
        associative polyurethane polymer and protecting or conditioning agent)
     26062-79-3 HCAPLUS
RN
CN
     2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, homopolymer
     (9CI)
           (CA INDEX NAME)
     CM
         1
     CRN 7398-69-8
     CMF C8 H16 N . Cl
```

$$H_2C = CH - CH_2 - N + CH_2 - CH = CH_2$$

Me

Me

Me

Me

• c1-

RN 26590-05-6 HCAPLUS

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ + \\ \text{CH} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 17 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2002:119260 HCAPLUS AN

136:172479 DN

ΤI Oxidative hair dye compositions comprising a cationic amphiphilic polymer, an oxyalkylated or glycerolated fatty alcohol, and a hydroxyl solvent

IN Laurent, Florence; Allard, Delphine

PΑ L'oreal, Fr.

SO Eur. Pat. Appl., 35 pp. CODEN: EPXXDW

DT Patent

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LA French
FAN.CNT 1
    PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
                                          -----
    EP 1179336
                                    EP 2001-402086 20010801
                    A1
                           20020213
PΙ
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    FR 2812810
                           20020215
                                          FR 2000-10593
                                                           20000811
                     A1
    FR 2812810
                      В1
                           20021011
    AU 764030
                      В2
                           20030807
                                          AU 2001-57852
                                                           20010807
                                          ZA 2001-6513
    ZA 2001006513
                     A
                           20020212
                                                           20010808
                                          CN 2001-133126
    CN 1338250
                     A
                          20020306
                                                           20010810
                                         BR 2001-4743
    BR 2001004743
                     Α
                          20020604
                                                           20010810
    RU 2223087
                     C2 20040210
                                         RU 2001-122636
                                                           20010810
    US 2002046431
                     A1 20020425
                                          US 2001-927510
                                                           20010813
    US 2003000026
                     A9 20030102
    US 6602303
                     B2 20030805
PRAI FR 2000-10593 A
                           20000811
    MARPAT 136:172479
OS
    The title hair dye compns. are disclosed. A hair dye
AΒ
    composition contained ethoxylated fatty alc. 32.5, glycerin 3, oleic acid 2,
    oleic alc. 1.8, copra acid monoisopropanolamide 4, cationic amphiphilic
    polymer (Quatrisoft LM200) 0.3, cationic non-amphiphilic polymer 1.8,
    amphoteric polymer (Merquat 280) 1.22, vegetable e cils 0.6, 20% ammonia
    8, 1,3-dihydroxybenzene 0.011, p-phenylenediamine 0.31,
    1-hydroxy-3-aminobenzene 0.035, 1-hydroxy-2-aminobenzene 0.023,
    1-hydroxy-4-aminobenzene 0.53, 5-N-(\beta-hydroxyethyl)-amino-2-
    methylphenol 1.07, 4-N-methylphenol sulfate 0.43, 5-methyl-2-aminophenol
    0.12, sequestering agents, antioxidants, reducing agents, and water q.s.
    100%. An oxidant composition contained fatty alc. 2.3, ethoxylated fatty alc.
    0.6, fatty amide 0.9, glycerin 0.5, hydrogen peroxide 7.5, perfume and
    water q.s. 100%. The hair dye composition is mixed with the oxidant
    composition at a ratio of 1 to 1.5 and used.
    ICM A61K007-13
IC
CC
    62-3 (Essential Oils and Cosmetics)
    oxidative hair dye cationic amphiphilic polymer; fatty alc
    solvent oxidative hair dye
    Polyelectrolytes
        (anionic; oxidative hair dye compns. comprising cationic
       amphiphilic polymer, oxyalkylated or glycerolated fatty alc., and
       hydroxyl solvent)
IΤ
    Polyelectrolytes
        (cationic, amphiphilic; oxidative hair dye compns. comprising
       cationic amphiphilic polymer, oxyalkylated or glycerolated fatty alc.,
       and hydroxyl solvent)
IT
    Hair preparations
        (dyes, oxidative; oxidative hair dye compns.
       comprising cationic amphiphilic polymer, oxyalkylated or glycerolated
       fatty alc., and hydroxyl solvent)
IT
    Alcohols, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (fatty, alkoxylated; oxidative hair dye compns. comprising
       cationic amphiphilic polymer, oxyalkylated or glycerolated fatty alc.,
       and hydroxyl solvent)
IT
    Salts, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (of peroxy acids; oxidative hair dye compns. comprising
       cationic amphiphilic polymer, oxyalkylated or glycerolated fatty alc.,
       and hydroxyl solvent)
```

```
ΙT
     Coupling agents
     Opacifiers
     Oxidizing agents
     Preservatives
     Solvents
     Sunscreens
     Thickening agents
        (oxidative hair dye compns. comprising cationic amphiphilic
        polymer, oxyalkylated or glycerolated fatty alc., and hydroxyl solvent)
ΙT
     Acrylic polymers, biological studies
     Carbohydrates, biological studies
     Ceramides
     Paraffin oils
     Polymers, biological studies
     Polyurethanes, biological studies
       Siloxanes (nonpolymeric)
     Vitamins
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oxidative hair dye compns. comprising cationic amphiphilic
        polymer, oxyalkylated or glycerolated fatty alc., and hydroxyl solvent)
ΙT
     Enzymes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oxidoredn.; oxidative hair dye compns. comprising cationic
        amphiphilic polymer, oxyalkylated or glycerolated fatty alc., and
        hydroxyl solvent)
IT
     Fats and Glyceridic oils, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (vegetable; oxidative hair dye compns. comprising cationic
        amphiphilic polymer, oxyalkylated or glycerolated fatty alc., and
        hydroxyl solvent)
IΤ
     79-10-7D, Acrylic acid, polymers
                                         108-45-2D, 1,3-Benzenediamine, derivs.
     110-86-1D, Pyridine, derivs. 124-43-6 289-95-2D, Pyrimidine, derivs. 533-31-3, Sesamol 533-31-3D, Sesamol, derivs. 591-27-5D, derivs.
     7722-84-1, Hydrogenperoxide, biological studies
                                                        9004-34-6D, Cellulose,
                       9004-62-0D, Hydroxyethyl cellulose, quaternary salts
     quaternary salts
     39455-90-8D, Pyrazolone, derivs. 53694-17-0, (Merquat 280)
     98616-25-2, (Quatrisoft LM200)
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oxidative hair dye compns. comprising cationic
        amphiphilic polymer, oxyalkylated or glycerolated fatty alc., and
        hydroxyl solvent)
TΤ
     56-81-5, Glycerin, uses
                               57-55-6, Propylene glycol, uses
                                                                   64 - 17 - 5,
     Ethanol, uses
                     71-23-8, Propanol, uses 71-36-3, Butanol, uses
     107-41-5, 2-Methyl-2, 4-pentanediol
                                         111-29-5, 1,5-Pentanediol
                                                                        126-30-7,
                                    504-63-2, 1,3-Propanediol
     2,2-Dimethyl-1,3-propandiol
                                                                684-84-4,
     2-Methyl-1,3-butanediol
                              2163-42-0, 2-Methyl-1,3-propanediol
                                                                     4457-71-0,
     3-Methyl-1,5-pentanediol
                               25265-71-8, Dipropylene glycol
     RL: NUU (Other use, unclassified); USES (Uses)
        (oxidative hair dye compns. comprising cationic amphiphilic
        polymer, oxyalkylated or glycerolated fatty alc., and hydroxyl solvent)
IT
     53694-17-0, (Merquat 280) 98616-25-2, (Quatrisoft LM200)
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oxidative hair dye compns. comprising cationic
        amphiphilic polymer, oxyalkylated or glycerolated fatty alc., and
        hydroxyl solvent)
RN
     53694-17-0 HCAPLUS
CN
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with
     2-propenoic acid (9CI) (CA INDEX NAME)
```

ELHILO 10/691427 5/4/04 Page 85

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 98616-25-2 HCAPLUS

CN Cellulose, ether with α -[3-(dodecyldimethylammonio)-2-hydroxypropyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) chloride (9CI) (CA INDEX NAME)

CM 1

CRN 169102-72-1

CMF (C2 H4 O)n C17 H38 N O2 . x Unspecified

CM 2

CRN 168810-59-1

CMF (C2 H4 O)n C17 H38 N O2

CCI PMS

CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

```
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L31 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN
     2002:30988 HCAPLUS
AN
    136:74297
DN
TI
    Clear and foamable aerosol hair care product composed of two phases
ΙN
     Keller, Walter; Kischka, Karl-Heinz
PΑ
     Wella Aktiengesellschaft, Germany
SO
     Eur. Pat. Appl., 14 pp.
     CODEN: EPXXDW
DT
     Patent
LA
    German
FAN.CNT 1
     PATENT NO.
                  KIND DATE
                                         APPLICATION NO. DATE
                     A2
PΙ
    EP 1169998
                           20020109
                                         EP 2001-112311 20010519
    EP 1169998
                     A3 20040128
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     DE 10033414
                           20020124
                                         DE 2000-10033414 20000708
                     A1
    DE 10033414
                      B4
                           20040219
    BR 2001002716
                      Α
                           20020226
                                         BR 2001-2716
                                                           20010705
     US 2002031478
                          20020314
                                          US 2001-899788
                      A1
                                                           20010705
    US 6589509
                      B2
                           20030708
PRAI DE 2000-10033414 A
                           20000708
    The invention concerns hair conditioners that are packaged in
    pressure-tight transparent containers and are composed of two clear
    phases; the hydrophilic phase contains water, water-miscible solvents, a
    cationic hair conditioner, and an organic or inorg. salt; the lipophilic
    phase includes the liquified propellant. Upon usage the two phases are
    mixed and sprayed as a foam. Thus an aerosol foam composition contained (g):
    polyvinylpyrrolidone 0.2; polyquaternium-11 0.18; Cetyltrimethyl ammonium
     chloride 0.25; quaternium-80 0.45; magnesium sulfate heptahydrate 0.2;
     isodecane 2.5; isobutane 6.8; butane 6.8; propane 1.8; water to 100.
    ICM A61K007-06
IC
     62-3 (Essential Oils and Cosmetics)
CC
ΙT
    Containers
      Dyes
     Pressure
     Propellants (sprays and foams)
     Transparency
        (clear and foamable aerosol hair care product composed of two phases)
ΙT
     Jojoba oil
    Paraffin oils
      Polysiloxanes, biological studies
     Protein hydrolyzates
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (clear and foamable aerosol hair care product composed of two phases)
ΙT
    Polysiloxanes, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, 3-[3-[(3-coco amidopropyl)dimethylammonio]-2-
       hydroxypropoxy]propyl group-terminated, acetates (salts); clear and
        foamable aerosol hair care product composed of two phases)
ΙT
    Cyclosiloxanes
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me; clear and foamable aerosol hair care product composed of two
       phases)
```

62-54-4, Calcium acetate 74-98-6, Propane, biological studies 106-97-8, Butane, biological studies 107-43-7, Betaine 112-02-7, Cetyltrimethyl ammonium chloride 115-10-6, Dimethylether 137-08-6 2456-28-2, Dicaprylether 7647-14-5, Sodium chloride, biological studies 7757-82-6, Sodium sulfate, biological studies 9003-39-8, 2-Pyrrolidinone, 1-ethenyl-, homopolymer 9012-76-4, Chitosan 10034-99-8, Magnesium sulfate heptahydrate 25086-89-9, Vinylpyrrolidone-vinylacetate copolymer 26590-05-6, Polyquaternium-7 30399-84-9, Isostearic acid 34464-38-5, Isodecane 34513-50-3, Octyldodecanol **53633-54-8**, Polyquaternium-11 84878-33-1, Cetylisononanoate 84878-34-2, Stearylisononanoate 95144-24-4, Polyquaternium-16 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (clear and foamable aerosol hair care product composed of two

ΙT 26590-05-6, Polyquaternium-7 53633-54-8,

Polyguaternium-11

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (clear and foamable aerosol hair care product composed of two phases)

26590-05-6 HCAPLUS RN

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

53633-54-8 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with CN 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM

CRN 64-67-5 CMF C4 H10 O4 S

CM

CRN 30581-59-0

(C8 H15 N O2 . C6 H9 N O) x CMF

CCI PMS

> CM 3

CRN 2867-47-2 CMF C8 H15 N O2

CM4

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2001:923577 HCAPLUS AN

DN 136:42518

ΤI Hair bleaches and dyes containing alkalies and oxidants

Matsuo, Takashi; Miyabe, Hajime; Shibata, Yutaka IN

Kao Corporation, Japan PCT Int. Appl., 32 pp. PA

SO

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE PΙ WO 2001095869 A1 20011220 WO 2001-JP4835 20010608

```
W: US
         RW: DE, FR, GB
     JP 2001354530
                      Α2
                            20011225
                                           JP 2000-175133
                                                            20000612
     JP 2001354531
                                           JP 2000-175134
                       A2
                            20011225
                                                            20000612
     EP 1291006
                       Α1
                            20030312
                                           EP 2001-938562
                                                            20010608
         R: DE, FR, GB
     US 2003192133
                      A1
                            20031016
                                           US 2002-275736
                                                            20021108
PRAI JP 2000-175133
                       Α
                            20000612
     JP 2000-175134
                       Α
                            20000612
     WO 2001-JP4835
                       W
                            20010608
     An oxidation-type hair bleach or dye which is composed of a first
     lotion containing an alkali agent and a second lotion containing an oxidizing
     agent, contains the following components (A), (B), (C), and (D) in amts.
     described below based on the whole of the mixture of the first lotion with
     the second one, and has a pH of 8 to 12: (A) 8-40 % a water-compatible
     organic solvent exhibiting an octanol-water partition coefficient (logP) of
     above at 25°C and having a mol. weight of \leq 200, (B) 0.1-10 %
     an alkali agent, (C) 0.1-12 % an oxidizing agent, hydrogen peroxide, and
     (D) 25-70 % water. This hair bleach or dye has a high bleaching
     power, can dye the hair in a good bright color, and is lowered
     in the irritant stench and the irritation to the scalp. A hair bleach
     comprised (1) a first lotion containing Na polyoxyethylene lauryl sulfate 15,
     coco fatty acid diethanolamide 40, benzyl alc. 25, ammonia water (28 %) 7,
     and water 13 % and (2) a second lotion containing Na polyoxyethylene lauryl
     sulfate 20, coco fatty acid diethanolamide 2, H2O2 solution (35 %) 17,
     phosphoric acid solution (75 %) 0.3, and water 60.7 %.
IC
     ICM A61K007-13
     ICS A61K007-135
     62-3 (Essential Oils and Cosmetics)
CC
ST
     hair bleach dye oxidant alkali surfactant
     Sulfonic acids, biological studies
IΤ
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (1-alkenesulfonic, sodium salts; hair bleaches and dyes
        containing alkalies and oxidants and surfactants in organic solvents)
ΙT
     Sulfonic acids, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkanesulfonic, sodium salts; hair bleaches and dyes containing
        alkalies and oxidants and surfactants in organic solvents)
ΙT
     Hair preparations
        (bleaches; hair bleaches and dyes containing alkalies and
        oxidants and surfactants in organic solvents)
     Amides, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (coco, N, N-bis(hydroxyethyl); hair bleaches and dyes containing
        alkalies and oxidants and surfactants in organic solvents)
IT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, polyoxyethylene-, graft; hair bleaches and dyes
        containing alkalies and oxidants and surfactants in organic solvents)
IT
     Hair preparations
        (dyes; hair bleaches and dyes containing alkalies and
        oxidants and surfactants in organic solvents)
ΙT
     Quaternary ammonium compounds, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polymers; hair bleaches and dves containing alkalies and
        oxidants and surfactants in organic solvents)
ΙT
     95-55-6, o-Aminophenol
                              95-70-5, Toluene-2,5-diamine
                                                            99-56-9,
     p-Nitro-o-phenylenediamine
                                100-51-6, Benzyl alcohol, biological studies
```

123-30-8, p-Aminophenol 591-27-5 622-08-2, 2-Benzyloxyethanol 1336-21-6, Ammonia water 2475-46-9, Disperse blue 3 2835-96-3, p-Amino-o-cresol 3179-90-6, Disperse blue 7 3520-42-1, Acid red 52 4292-10-8, Laurylamidopropylbetaine 7722-84-1, Hydrogen peroxide, biological studies 8004-92-0, Acid yellow 3 9002-92-0, Polyoxyethylene 9004-82-4, Sodium polyoxyethylene lauryl ether sulfate laurvl ether 9016-45-9, Polyoxyethylene nonyl phenyl ether 12221-52-2, Basic red 22 24938-91-8, Polyoxyethylene tridecyl ether 26590-05-6, Merquat 29923-31-7, Sodium N-lauroyl glutamate 32128-65-7, Polyoxyethylene octyl dodecyl ether 53694-17-0, Merquat 280 54381-16-7, N, N-Bis(2-hydroxyethyl)p-phenylenediamine sulfate 68391-30-0, Basic red 70643-19-5, 2,4-Diaminophenoxyethanol 81859-24-7, Catinal LC 100 160950-38-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair bleaches and dyes containing alkalies and

oxidants and surfactants in organic solvents)

26590-05-6, Merguat 550 **53694-17-0**, Merguat 280 ΙT

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(hair bleaches and dyes containing alkalies and oxidants and surfactants in organic solvents)

26590-05-6 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{H}_2\text{C} \begin{array}{c} \longrightarrow \\ \text{CH} - \text{CH}_2 - \text{N} \\ \mid \\ \text{Me} \end{array} \\ \text{CH}_2 - \text{CH} \begin{array}{c} \longrightarrow \\ \text{CH}_2 \\ \text{CH}_2 \\ \end{array}$$

● C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \end{matrix}$$

RN 53694-17-0 HCAPLUS

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1 ELHILO 10/691427 5/4/04 Page 91

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:780637 HCAPLUS

DN 135:335009

TΙ Phase-separated rinse-off hair coloring/cleansing products

ΙN Wells, Robert Lee; Crane, Elizabeth Ann

Procter + Gamble Company, USA PCT Int. Appl., 41 pp. PA

SO

CODEN: PIXXD2

DT Patent

English LA

FAN.	CNT	1																
	PATENT NO.			KI	ND	DATE			APPLICATION NO.				0.	DATE				
PI	WO	O 2001078671					20011025			WO 2001-US11661				20010409				
	WO						20020510											
		W:	ΑE,	AG,	AL,	AM,	AT,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EE,	EE,	ES,	FI,
			FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,
			KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	, WM	MX,
			MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SK,	SL,	ТJ,	TM,
			TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,
			RU,	ТJ,	TM													
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	ΤZ,	UG,	ZW,	AT,	BE,	CH,	CY,
			DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
			ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	EP 1276453			A2 20030122				EP 2001-928439 200				2001	0409					
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
	JP 2003530418		18	T	2	20031014			JP 2001-575973 20010409									

Polyelectrolytes

Surfactants

(cationic; phase-separated rinse-off hair coloring/cleansing products)

IT

(direct; phase-separated rinse-off hair coloring/cleansing products)

ΙT Hair preparations

> (dyes; phase-separated rinse-off hair coloring/cleansing products)

ΙT Betaines

Carboxylic acids, biological studies

Polysiloxanes, biological studies Proteins, general, biological studies

Quaternary ammonium compounds, biological studies

Sulfobetaines

Sulfonic acids, biological studies

Vitamins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(phase-separated rinse-off hair coloring/cleansing products)

IΤ Dyes

IT

ΙT

IT

(water-soluble; phase-separated rinse-off hair coloring/cleansing products) 68039-13-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(Uses) (Polycare 133; phase-separated rinse-off hair coloring/cleansing products)

56-40-6D, Glycine, derivs., biological studies 70-47-3D, Asparagine, derivs. 107-97-1D, Sarcosine, derivs. 2235-54-3, Ammonium lauryl sulfate 7664-38-2D, Phosphoric acid, esters, biological studies 7664-93-9D, Sulfuric acid, esters, biological studies 9006-65-9, Dimethicone 26062-79-3, Dimethyldiallylammonium chloride 32612-48-9, Ammonium laureth sulfate homopolymer 65497-29-2, Guar hydroxypropyltrimonium chloride 68123-13-7, Basic blue 99 156028-14-7,

Sodium lauroamphoacetate 176742-32-8, Basic brown 17 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(phase-separated rinse-off hair coloring/cleansing products) 68039-13-4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Polycare 133; phase-separated rinse-off hair coloring/cleansing products)

RN 68039-13-4 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

CMF C10 H21 N2 O . C1

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_3 + \text{N} - \text{(CH}_2)_3 - \text{NH} - \text{C} - \text{C} - \text{Me} \end{array}$$

• cl-

IT 26062-79-3, Dimethyldiallylammonium chloride homopolymer

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(phase-separated rinse-off hair coloring/cleansing products)

RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

L31 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:729697 HCAPLUS

DN 135:277719

TI Roll-on applicator containing a hair-treating composition

IN Jourdan, Herve; Pasquet, Dorothee

PA L'oreal, Fr.

SO Eur. Pat. Appl., 32 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

PATENT NO.

KIND DATE

APPLICATION NO. DATE

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_____
    _____
                                         EP 2001-400555 20010302
                     A1 20011004
PΙ
    EP 1138315
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
                                                           20000314
                                          FR 2000-3251
                          20010921
    FR 2806274
                     Α1
                          20020920
    FR 2806274
                      В1
                                                           20010220
                      В2
                          20030529
                                         AU 2001-23121
    AU 761264
    JP 2001294517
                     A2
                         20011023
                                         JP 2001-70774
                                                           20010313
                                                           20010313
    CN 1336151
                     A
                          20020220
                                         CN 2001-117316
                     C2 20031127
                                         RU 2001-106946
                                                           20010313
    RU 2217536
                          20011030
                                         BR 2001-1175
                                                           20010314
    BR 2001001175
                     A
                                         US 2001-805060
                                                           20010314
    US 2003012758
                      A1 20030116
    US 6635262
                      B2
                           20031021
PRAI FR 2000-3251
                     Α
                           20000314
    A roll-on applicator containing a hair-treating composition is disclosed. The
    composition comprises carboxylic surfactants, fixative polymers, and
    dves. A hair preparation contained Synthalen K 0.5, 3% Aristoflex A,
    Mirasil DMCO 0.1, perfume 0.3, ethanol 40, AMP q.s. pH = 7.6, and water
    q.s. 100 %.
IC
    ICM A61K007-06
    ICS A45D034-04
CC
     62-3 (Essential Oils and Cosmetics)
IT
    Polysiloxanes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (di-Me, 3-hydroxypropyl Me, ethoxylated propoxylated; roll-on
       applicator containing hair-treating composition)
     Polysiloxanes, biological studies
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (di-Me, ethoxylated propoxylated; roll-on applicator containing
       hair-treating composition)
    Acrylic polymers, biological studies
IΤ
    Ceramides
     Fatty acids, biological studies
     Glycols, biological studies
     Paraffin oils
     Polyamides, biological studies
     Polymers, biological studies
     Polyolefins
      Polysiloxanes, biological studies
     Proteins, general, biological studies
     Vitamins
     Waxes
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (roll-on applicator containing hair-treating composition)
     92183-41-0, Celquat LOR
IΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (Celquat LOR; roll-on applicator containing hair-treating composition)
ΙT
     25212-88-8, Luvimer MAE
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (Luvimer MAE; roll-on applicator containing hair-treating composition)
     56-81-5, Glycerin, biological studies 79-10-7D, Acrylic acid, esters,
     polymers with vinyl acetate 107-13-1D, Acrylonitrile, polymers
     108-05-4D, Vinylacetate, polymers with acrylic esters 110-16-7D, Maleic
     acid, esters, polymer swith vinyl acetate 2116-84-9, dow corning 556
```

9003-18-3D, Acrylonitrile butadiene copolymer, polymers 9003-20-7, vinyl acetate homopolymer 9003-29-6, polybutene 9004-34-6D, Cellulose, esters, biological studies 9004-62-0D, Hydroxyethyl cellulose, quaternary ammonium salts 9006-26-2, Ethylene maleic anhydride copolymer 24937-78-8, Ethylene vinyl acetate copolymer 26062-56-6, Ultrahold strong 26062-79-3, Diallyldimethylammonium chloride homopolymer 26590-05-6, 28791-69-7 Acrylamide Diallyldimethylammonium chloride copolymer 29297-55-0, Vinylpyrrolidone vinylimidazole copolymer 37309-58-3, polydecene 39421-75-5, jaguar hp 105 42557-10-8, dow corning 200 **53633-54-8**, gafquat 734 54422-45-6 54482-09-6 **68134-63-4**, Aristoflex a 76050-42-5, Synthalen k 96673-02-8 129426-19-3 150177-00-7 160065-31-6 149591-38-8 110483-07-3 163063-14-7, aculyn 22 195739-91-4, Carbopol Ultrez 10 203341-07-5, 206052-70-2 264189-48-2, Solanace dow corning 939 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(roll-on applicator containing hair-treating composition)

IT 92183-41-0, Celquat LOR

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Celquat LOR; roll-on applicator containing hair-treating composition)

RN 92183-41-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● C1-

CM 2

CRN 9004-62-0 CMF C2 H6 O2 . x Unspecified

CM 3

CRN 9004-34-6 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

ELHILO 10/691427 5/4/04

> CRN 107-21-1 CMF C2 H6 O2

HO-CH2-CH2-OH

ΙT 25212-88-8, Luvimer MAE

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

Page 96

(Luvimer MAE; roll-on applicator containing hair-treating composition)

RN 25212-88-8 HCAPLUS

2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate (9CI) (CA CN INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

$$\begin{array}{c} \text{O} \\ || \\ \text{EtO-C-CH------} \text{CH}_2 \end{array}$$

CM 2

CRN 79-41-4 CMF C4 H6 O2

9003-18-3D, Acrylonitrile butadiene copolymer, polymers 26062-56-6, Ultrahold strong 26062-79-3,

Diallyldimethylammonium chloride homopolymer 26590-05-6, Acrylamide Diallyldimethylammonium chloride copolymer 53633-54-8 , gafquat 734 **68134-63-4**, Aristoflex a

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(roll-on applicator containing hair-treating composition)

RN 9003-18-3 HCAPLUS

2-Propenenitrile, polymer with 1,3-butadiene (9CI) (CA INDEX NAME) CN

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

ELHILO 10/691427 5/4/04 Page 97

CM 2

CRN 106-99-0 CMF C4 H6

 $H_2C = CH - CH = CH_2$

RN 26062-56-6 HCAPLUS

CN 2-Propenoic acid, polymer with N-(1,1-dimethylethyl)-2-propenamide and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 107-58-4 CMF C7 H13 N O

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

26590-05-6 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH-CH}_2 \\ | \\ \text{Me} \end{array}$$

• c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 53633-54-8 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with CN 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O)x

CCI PMS

> CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{--} \text{CH}_2 \text{--} \text{O-C-C-Me} \end{array}$$

CM

CRN 88-12-0 CMF C6 H9 N O

68134-63-4 HCAPLUS RN

CN 2-Butenoic acid, polymer with ethenyl acetate and $\alpha\textsc{-hydro-}\omega\textsc{-}$ hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM

CRN 25322-68-3

CMF (C2 H4 O)n H2 O

CCI PMS

CM 2 CRN 3724-65-0 CMF C4 H6 O2

Me-CH-CO2H

3 CM

CRN 108-05-4 CMF C4 H6 O2

AcO-CH-CH2

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 22 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

2001:586491 HCAPLUS ΑN

DN 135:170471

TICompositions containing alcohols for hair treatment agents

Ota, Toshio; Aga, Michihiro; Watanabe, Katsuhiro ΙN

PA

Sanei Kagaku Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 17 pp. SO

CODEN: JKXXAF

DT Patent

LA Japanese

FAN CNT 4

r MN.	→IN T	4							
•	PA'	FENT NO.	KIND	DATE	AP	PLICATION NO.	DATE		
ΡI	JΡ	2001220333	A2	20010814	JP	2001-99823	20010330		
	US	2003103923	A1	20030605	US	2002-105234	20020326		
PRAI	JΡ	2001-95360	A	20010329					
	JΡ	2001-95361	A ´	20010329					
	JΡ	2001-99822	A	20010330					
	JΡ	2001-99823	A	20010330					

- AB The compns., for hair conditioners, dyes, wave-setting prepns., hair-styling prepns., perfume dispersions, refresheners, and thickening agents, contain alcs. A hair conditioner containing cetanol, glycerin monostearate, and cetyltrimethylammonium chloride showed hair-smoothing and -softening effect.
- ICM A61K007-13 IC

ICS A61K007-09; A61K007-135

- CC 62-3 (Essential Oils and Cosmetics)
- ΙT Polysiloxanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Me, polyoxyethylene-; hair treatment compns. containing alcs. and) TΨ Polysiloxanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(Me; hair treatment compns. containing alcs. and)

Hair preparations ΙT

(dyes; hair treatment compns. containing alcs.)

Amines, biological studies TΤ

Lactams

```
Polymers, biological studies
     Polyoxyalkylenes, biological studies
       Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair treatment compns. containing alcs. and)
ΤТ
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polyoxyalkylene-; hair treatment compns. containing alcs. and)
TT
     Polyoxyalkylenes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (polysiloxane-; hair treatment compns. containing alcs. and)
TΤ
     57-11-4, Stearic acid, biological studies 79-41-4D, Methacrylic acid,
     alkyl esters, polymers with methacryloyloxyethyldimethylammonium
     methylcarboxybetaine 87-69-4, Tartaric acid, biological studies
     94-13-3, Propyl p-hydroxybenzoate 99-76-3, Methyl p-hydroxybenzoate
     102-71-6, Triethanolamine, biological studies
                                                    107-43-7, Trimethylglycine
     124-68-5, 2-Amino-2-methyl-1-propanol 139-33-3, Disodium edetate
     541-02-6, Decamethylcyclopentasiloxane
                                            872-50-4,
     N-Methylpyrrolidone, biological studies
                                               9000-07-1, Carrageenan
     9002-92-0, Polyoxyethylene lauryl ether 9003-01-4, Poly(acrylic
            9003-11-6, Ethylene oxide-propylene oxide copolymer
     acid)
                                                                   9003-39-8,
                             9004-62-0, Hydroxyethyl cellulose
     Poly(vinylpyrrolidone)
                                                                  9004-98-2,
     Polyoxyethylene oleyl ether 9005-12-3, Methylphenylsilanediol
                        9005-37-2, Propylene glycol alginate
     homopolymer, sru
                                                               9016-45-9,
     Polyoxyethylene nonylphenyl ether 25119-63-5, Butyl maleate-vinyl methyl
     ether copolymer 25322-68-3, Polyethylene glycol
                                                       25322-68-3D,
     Polyethylene glycol, derivs. 25609-89-6, Vinyl acetate-crotonic
     acid copolymer 26590-05-6, Acrylamide-dimethyldiallylammonium
     chloride copolymer
                         26636-40-8, Polyoxyethylene behenyl ether
     31230-04-3, Methylphenylsilanediol homopolymer
                                                      52292-17-8,
     Polyoxyethylene isostearyl ether 53633-54-8
                                                   62723-61-9D,
     polymers with alkyl methacrylates 163633-70-3
                                                    192509-04-9,
     Ethyl maleate-vinyl methyl ether copolymer
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair treatment compns. containing alcs. and)
     9003-01-4, Poly(acrylic acid) 25609-89-6, Vinyl
     acetate-crotonic acid copolymer 26590-05-6, Acrylamide-
     dimethyldiallylammonium chloride copolymer 53633-54-8
     163633-70-3
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair treatment compns. containing alcs. and)
     9003-01-4 HCAPLUS
CN
     2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)
     CM
         1
     CRN 79-10-7
     CMF C3 H4 O2
   0
```

HO-C-CH-CH2

RN 25609-89-6 HCAPLUS

CN 2-Butenoic acid, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 3724-65-0

CMF C4 H6 O2

 $Me-CH=CH-CO_2H$

CM 2

CRN 108-05-4

CMF C4 H6 O2

 $AcO-CH-CH_2$

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8

CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-06-1

CMF C3 H5 N O

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX

NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

RN 163633-70-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(butylamino)ethyl ester, polymer with N-octyl-2-propenamide and 1,2-propanediol mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 24171-27-5 CMF C10 H19 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{n-BuNH-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$$

CM2

CRN 10124-68-2 CMF C11 H21 N O

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2) \text{ 7-NH-C-CH} \end{array}$$

CM 3

CRN 25584-83-2 CMF C6 H10 O3 CCI IDS

> CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 57-55-6 CMF C3 H8 O2

L31 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

1999:487202 HCAPLUS AN

DN 131:134394

Ammonia-free composition for dyeing hair fibers ΤI

IN Yaker, Myriam; Lascar, Guy

PΑ

Perma, Eugene, Fr. PCT Int. Appl., 28 pp. SO

CODEN: PIXXD2

DTPatent

LA French FAN.CNT 1

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PATENT NO.
                  KIND DATE
                                         APPLICATION NO. DATE
     WO 9937278
                     A1 19990729
                                      WO 1999-FR114
                                                            19990120
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,
             KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,
             MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2773992
                      A1
                           19990730
                                          FR 1998-738
                                                            19980123
     FR 2773992
                       В1
                            20000616
     CA 2319266
                                           CA 1999-2319266 19990120
                      AΑ
                            19990729
     AU 9920610
                      Α1
                            19990809
                                          AU 1999-20610
                                                            19990120
     AU 754260
                      В2
                            20021107
     EP 1047385
                      Α1
                           20001102
                                           EP 1999-900972
                                                            19990120
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     US 6423101
                      В1
                           20020723
                                           US 2000-600834
                                                            20001020
PRAI FR 1998-738
                           19980123
                      Α
     WO 1999-FR114
                      W
                           19990120
     The invention concerns an ammonia-free composition for dyeing hair
AΒ
     fibers, comprising an oxidant compound, dye precursors and a
     non-volatile odorless alkaline agent characterized in that it further
     comprises: a quaternized copolymer of dimethyldiallylammonium and acrylic
     acid; a quaternized silicone; an acrylic-itaconic copolymer esterified
     with 1 or several fatty alcs., optionally polyoxyethylenated. Thus, a gel
     contained Merquat-280 0.8, Abil Quat-3272 0.1, EtOH 14.4, Ethomeen-T012
     14.0, monoethanolamine 11.5, Dehyton K-COS 12.0, white olein 8.0, Masquol
     P-550 1.0, Dowanol-PM 5.0, 35% Na bisulfite 1.5 p-phenylenediamine 1.5,
     p-aminophenol 0.25, hydrquinone 0.15, resorcinol 0.35, m-aminophenol 0.06,
     m-phenylenediamine 0.035, p-amino-o-cresol 0.0015, 1-phenyl-3-methyl-5-
     pyrazolone 0.2. and water to 100%. A second composition contained Na
     pyrophosphate 0.01, sodium stannate 0.02, Masquol 0.15, Structure-2001
     0.40, Structure-3001 0.92, 50% oxygenated water 12.0, 85% orthophosphoric
     acid 0.1, and water 100%. The 2 compns. were mixed and used for hair
     prepns.
IC
     ICM A61K007-13
     ICS A61K007-06
     62-3 (Essential Oils and Cosmetics)
CC
     hair dye acrylic polymer silicone; PEG acrylic itaconate hair
ST
ΙT
     Oxidizing agents
        (ammonia-free composition for dyeing hair fibers)
ΙT
     Acrylic polymers, biological studies
     Alcohols, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (ammonia-free composition for dyeing hair fibers)
ΙT
    Hair preparations
        (creams; ammonia-free composition for dyeing hair fibers)
ΙT
     Polysiloxanes, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (di-Me, 3-[3-[(3-coco amidopropyl)dimethylammonio]-2-
       hydroxypropoxy]propyl group-terminated, acetates (salts), Abil Quat
```

3272; ammonia-free composition for dyeing hair fibers) ΙT Polysiloxanes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (di-Me, quaternary ammonium group-contg; ammonia-free composition for dyeing hair fibers) IT Hair preparations

(dyes; ammonia-free composition for dyeing hair fibers)

TΤ Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(fatty, ester with acrylic acid copolymers; ammonia-free composition for dyeing hair fibers)

TТ Hair preparations

(gels; ammonia-free composition for dyeing hair fibers)

102-71-6, biological studies 124-68-5 141-43-5, Monoethanolamine, biological studies 7722-84-1, Hydrogen peroxide, biological studies TΨ **25136-75-8**, Polyquaternium 39 **53694-17-0**, Merquat 280 217087-71-3, Structure 2001 217087-72-4, Structure 3001 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(ammonia-free composition for dyeing hair fibers) 25136-75-8, Polyquaternium 39 53694-17-0, Merquat 280 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(ammonia-free composition for dyeing hair fibers)

RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM

ΙT

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} &= \text{CH} - \text{CH}_2 - \text{N} \\ | \\ | \\ \text{Me} \end{array} \text{CH}_2 - \text{CH} \\ &= \text{CH}_2$$

● c1-

CM 2

CRN 79-10-7 CMF C3 H4 O2

CM 3

CRN 79-06-1 CMF C3 H5 N O

RN 53694-17-0 HCAPLUS

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenoic acid (9CI) (CA INDEX NAME)

СM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● Cl -

CM 2

CRN 79-10-7 CMF C3 H4 O2

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

1999:464164 HCAPLUS ΑN

DN 131:120589

Hair dye composition containing a laccase TΙ

Lang, Gerard; Cotteret, Jean IN

L'Oreal, Fr. PΑ

PCT Int. Appl., 37 pp. SO

CODEN: PIXXD2

DT Patent

French LA

FAN.CNT 1

```
PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
     ______
                                         _____
    WO 9936035
                                       WO 1998-FR2794 19981218
PΙ
                    A1 19990722
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
            NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
            UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
            FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
            CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
    FR 2773477
                    A1 19990716
                                        FR 1998-254
                                                          19980113
    FR 2773477
                     В1
                           20010223
                     AA
                          19990722
    CA 2318321
                                        CA 1998-2318321 19981218
    AU 9917666
                     A1
                          19990802
                                         AU 1999-17666
                                                          19981218
    AU 729022
                     В2
                         20010125
    BR 9814740
                    Α
                           20001017
                                        BR 1998-14740
                                                          19981218
    EP 1047377
                    A1
                           20001102
                                         EP 1998-962518
                                                          19981218
    EP 1047377
                     В1
                           20010627
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
    AT 202469
                     E
                           20010715
                                         AT 1998-962518
                                                          19981218
    ES 2161074
                     T3 20011116
                                         ES 1998-962518
                                                          19981218
    PT 1047377
                     T
                          20011228
                                        PT 1998-962518
                                                          19981218
    JP 2002509087
                     T2
                         20020326
                                        JP 2000-539811
                                                          19981218
    RU 2204377
                     C2
                          20030520
                                         RU 2000-121060
                                                          19981218
    GR 3036644
                     Т3
                          20011231
                                         GR 2001-401502
                                                          20010918
                    A
PRAI FR 1998-254
                          19980113
    WO 1998-FR2794 W
                          19981218
AΒ
    The invention concerns a ready-to-use composition for dyeing human
    keratinous fibers and more particularly human hair, comprising (a) at
    least an enzyme such as laccase; (b) at least a cationic substance or
    particular amphoteric polymer; (c) at least an oxidation coloring agent, as
    well as the dyeing methods using said composition
IC
    ICM A61K007-13
CC
    62-3 (Essential Oils and Cosmetics)
ST
    hair dye laccase formulation
ΙT
    Polysiloxanes, biological studies
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (3-[(2-aminoethyl)amino]-2-methylpropyl Me, di-Me; hair dye
       composition containing a laccase)
TΤ
    Polysiloxanes, biological studies
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        ([(aminoethyl)amino]propyl hydroxy, di-Me; hair dye composition
       containing a laccase)
ΙT
    Polysiloxanes, biological studies
    RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
    chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
        (cationic; hair dye composition containing a laccase)
ΤТ
    Polymers, biological studies
    RL: BUU (Biological use, unclassified); PEP (Physical, engineering or
    chemical process); BIOL (Biological study); PROC (Process); USES (Uses)
       (co-, dimethyldiallylammonium halide; hair dye composition containing
       a laccase)
IT
    Hair preparations
```

```
(dyes; hair dye composition containing a laccase)
ΙT
     Oxidation
        (enzymic; hair dye composition containing a laccase)
ΙT
     Antioxidants
     Buffers
     Coupling agents
     Dispersing agents
     Opacifiers
     Perfumes
     Permeation enhancers
     Preservatives
     Sequestering agents
     Surfactants
     Thickening agents
        (hair dye composition containing a laccase)
ΙT
    Enzymes, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BUU (Biological use, unclassified); NUU (Other use,
     unclassified); PEP (Physical, engineering or chemical process); BIOL
     (Biological study); PROC (Process); USES (Uses)
        (hair dye composition containing a laccase)
IT
    Keratins
     RL: BPR (Biological process); BSU (Biological study, unclassified); PRP
     (Properties); BIOL (Biological study); PROC (Process)
        (hair dye composition containing a laccase)
ΙT
    Paraffin oils
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (hair dye composition containing a laccase)
ΙT
     Polymers, biological studies
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (hair dye composition containing a laccase)
TT
    Vitamins
    RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (hair dye composition containing a laccase)
ΤТ
    Chlorophylls, biological studies
    RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL
     (Biological study); FORM (Formation, nonpreparative)
        (laccases of plants producing; hair dye composition containing a
        laccase)
IT
    Agaricus bisporus
    Anacardiaceae
    Apple
    Aspergillus nidulans
    Avocado (Persea americana)
    Banana (Musa)
    Botrytis cinerea
    Carrot
    Catharanthus roseus
    Ceriporiopsis subvermispora
    Cerrena unicolor
    Chaetomium thermophilum
    Cladosporium cladosporioides
    Coffee (Coffea)
```

ΙT

IT

ΙΤ

ΙT

Coprinus cinereus Dichomitus squalens Fomes fomentarius Ganoderma lucidum Ginkgo biloba Glomerella cinqulata Heterobasidion annosum Horse chestnut (Aesculus) Iris (plant) Lacquer tree Lactarius piperatus Maple (Acer pseudoplatanus) Monotropa hypopitys Myceliophthora thermophila Neurospora crassa Panaeolus papilionaceus Panaeolus sphinctrinus Peach (Prunus persica) Phellinus noxius Pistacia palaestina Pleurotus ostreatus Podocarpaceae Podospora anserina Polyporus pinsitus Potato (Solanum tuberosum) Pyricularia oryzae Rhizoctonia solani Rigidoporus lignosus Rosemary Russula delica Schizophyllum commune Scytalidium Thelephora terrestris Trametes hirsuta Trametes versicolor Vinca minor (laccases of; hair dye composition containing a laccase) Solvents (organic; hair dye composition containing a laccase) 2835-95-2, 2-Methyl 5-aminophenol RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (coupling agent; hair dye composition containing a laccase) 26161-33-1, Poly(methacryloyloxyethyltrimethylammonium chloride) 35429-19-7 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (cross-linked; hair dye composition containing a laccase) 9003-99-0, Peroxidase 9055-15-6, Oxidoreductase RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (hair dye composition containing a laccase) 80498-15-3, Laccase RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process);

USES (Uses)

(hair dye composition containing a laccase) 88-12-0D, polymeric derivs. 89-25-8 90-15-3, α -Naphthol 95-54-5D, 1,2-Benzenediamine, derivs., biological studies 95-55-6D. 95-88-5, 4-Chloro-1, 3-dihydroxybenzene 106-50-3D, 1,4-Benzenediamine, derivs., biological studies 108-26-9 108-45-2, 1,3-Benzenediamine, biological studies 108-45-2D, 1,3-Benzenediamine, derivs., biological studies 108-46-3, 1,3-Dihydroxybenzene, biological 108-46-3D, 1,3-Benzenediol, derivs., biological studies 123-30-8D, derivs. 533-31-3, Sesamol 591-27-5, 3-Aminophenol 591-27-5D, derivs. 608-25-3, 1,3-Dihydroxy-2-methylbenzene 2380-86-1, 6-Hydroxyindole 4664-16-8, 2,6-Dihydroxy-4-methylpyridine

53694-17-0, Merquat 280 55302-96-0 66422-95-5, 2,4-Diaminophenoxyethanol dihydrochloride 70643-19-5 81892-72-0

197179-33-2, Oramix CG110 231958-91-1 93846-05-0 RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye composition containing a laccase) 88-12-0D, cationic copolymers 26590-05-6, Acrylamidediallyldimethylammonium chloride copolymer 57564-45-1 98616-25-2, Polyquaternium-24 223104-80-1 RL: BUU (Biological use, unclassified); PEP (Physical, engineering or

chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (hair dye composition containing a laccase)

ΙT 26161-33-1, Poly(methacryloyloxyethyltrimethylammonium chloride)

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (cross-linked; hair **dye** composition containing a laccase)

RN 26161-33-1 HCAPLUS

Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, CN chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . C1

O CH₂ $Me_3^+N-CH_2-CH_2-O-C-C-Me$

• c1-

RN 35429-19-7 HCAPLUS

Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, CN chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM

CRN 5039-78-1 CMF C9 H18 N O2 . C1

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_3 + \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{C} - \text{Me} \end{array}$$

• cl-

СМ

CRN 79-06-1 CMF C3 H5 N O

ΙT **53694-17-0**, Merquat 280

RL: BUU (Biological use, unclassified); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses)

(hair dye composition containing a laccase)

53694-17-0 HCAPLUS RN

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● C1-

CM2

CRN 79-10-7 CMF C3 H4 O2

IT 26590-05-6, Acrylamide-diallyldimethylammonium chloride copolymer
57564-45-1 98616-25-2, Polyquaternium-24
223104-80-1

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process); USES (Uses) (hair dye composition containing a laccase)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \begin{array}{c} \text{Me} \\ \downarrow \\ \text{N} \end{array} = \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 57564-45-1 HCAPLUS

CN Poly[(dimethyliminio)-1,3-propanediyl(dimethyliminio)-1,5-pentanediyl dichloride] (9CI) (CA INDEX NAME)

•2 C1-

RN 98616-25-2 HCAPLUS

CN Cellulose, ether with α -[3-(dodecyldimethylammonio)-2-hydroxypropyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) chloride (9CI) (CA INDEX NAME)

CM 1

CRN 169102-72-1

CMF (C2 H4 O)n C17 H38 N O2 . x Unspecified

CM 2

CRN 168810-59-1

CMF (C2 H4 O)n C17 H38 N O2

CCI PMS

CM 3

CRN 9004-34-6 CMF Unspecified

CMF ONSpectified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 223104-80-1 HCAPLUS

CN Poly[(diethyliminio)-1,3-propanediyl(dimethyliminio)-1,3-propanediyl dibromide] (9CI) (CA INDEX NAME)

●2 Br-

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN 1999:296972 HCAPLUS ANDN 131:9443 Hair dyes containing amphoteric polymers TΙ Takahashi, Toshinobu; Kurita, Nobuyuki ΙN Shiseido Co., Ltd., Japan PA Jpn. Kokai Tokkyo Koho, 19 pp. SO CODEN: JKXXAF DT Patent Japanese T.A FAN.CNT 1 JP 11124310 TO KIND DATE APPLICATION NO. DATE PATENT NO. A2 19990511 JP 11124319 JP 1997-306441 19971020 PRAI JP 1997-306441 19971020 Hair dyes which provide improved coloring capability, stability, and water resistance with little color transfers, comprise (1) amphoteric polymers, (2) acidic dyes, and (3) pigments. The dye compns. may further contain a foaming agent, ethanol, and water. A hair mousse contained an amphoteric copolymer, i.e. [CH2=CMeCO2C2H4N+Me2CH2CO2-]x[CH2=CMeCO2C17H35]y[CH2=CMeCO2C4H9]z (mol. weight 200,000) 6, naphthol blue black 0.1, naphthol yellow S 0.2, orange II 0.04, acid fuchsine D 0.15, carbon black 1, glycerin 1, dimethylpolysiloxane 3, polyoxyethylene hydrogenated castor oils 3, ethanol 20, perfumes q.s, LPG 8, and deionized water q.s. to 100 %. IC ICM A61K007-06 ICS A61K007-13 CC 62-3 (Essential Oils and Cosmetics) hair acidic dye amphoteric polymer STΙT Hair preparations (dyes; hair dyes containing amphoteric polymers and acidic **dyes** and pigments) TT Hair preparations (gels; hair dyes containing amphoteric polymers and acidic dyes and pigments) TΤ Carbon black, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (hair dyes containing amphoteric polymers and acidic dyes

(mousses; hair dyes containing amphoteric polymers and acidic

and pigments)

Hair preparations

ΙT

dyes and pigments)

IT Hair preparations

(sprays; hair ${\tt dyes}$ containing amphoteric polymers and acidic

dyes and pigments)

IT 633-96-5, Orange II 846-70-8, Naphthol yellow S 1064-48-8, Naphthol blue black 1332-37-2, Iron oxide, biological studies 3567-66-6, Acid fuchsine D 212832-26-3 225366-96-1 225366-97-2
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT 212832-26-3 225366-96-1 225366-97-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing amphoteric polymers and acidic dyes and pigments)

RN 212832-26-3 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with heptadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 6140-75-6 CMF C21 H40 O2

$$$^{\rm O}$$$
 CH2 $$^{\rm H}_{\rm 2}$$ Me- (CH2)16-O-C-C-Me

RN 225366-96-1 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-methyl-2-propenoate and heptadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM

CRN 6140-75-6 CMF C21 H40 O2

$$$^{\text{O}}_{\text{H2}}$$$
 Me- (CH2) 16-0-C-C-Me

CM 3

CRN 97-88-1 CMF C8 H14 O2

225366-97-2 HCAPLUS RN

CN $1-\texttt{Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propenyl)oxy]-1-propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-1-propenyl)oxy]-1-propenyl)oxy]-1-propenyloxyethyl-1-prop$, inner salt, polymer with butyl 2-propenoate and heptadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 155559-37-8 CMF C11 H19 N O4

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & + \\ & + \\ & \text{O}_2\text{C} - \text{CH}_2 - \text{CH}_2 - \text{N} + \\ & + \\ & \text{Me} \end{array}$$

CM

CRN 28343-58-0 CMF C20 H38 O2

```
0
Me-(CH_2)_{16}-O-C-CH=CH_2
     CM
         3
     CRN 141-32-2
     CMF C7 H12 O2
      0
n-BuO-C-CH=CH2
L31 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1999:166502 HCAPLUS
DN
     130:227503
     Cosmetic hair compositions containing an amine polyoxyalkylene silicon
TΙ
    block and a conditioning agent
ΙN
     Restle, Serge; Cauwet-Martin, Daniele
PA
    L'Oreal, Fr.
     PCT Int. Appl., 50 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
    French
FAN.CNT 1
     PATENT NO. KIND DATE
                                        APPLICATION NO. DATE
                     ____
                           -----
                                          _____
    WO 9909939 A1 19990304
                                        WO 1998-FR1845 19980824
PΤ
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
            DK, EE, ES, FI, GB, GE, GH, HR, HU, ID, IL, IS, JP, KE, KG, KP,
            KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
            NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
            UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2767473
                          19990226
                                         FR 1997-10617
                      A1
                                                           19970825
     FR 2767473
                          20000310
                      В1
     CA 2302816
                          19990304
                                          CA 1998-2302816 19980824
                      AA
    AU 9890785
                      Α1
                           19990316
                                          AU 1998-90785
                                                           19980824
    AU 729045
                           20010125
                      В2
    EP 1009366
                      A1
                           20000621
                                          EP 1998-942778
                                                           19980824
     EP 1009366
                     В1
                           20030326
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI
     JP 2001513534
                      T2
                           20010904
                                          JP 2000-507331
                                                           19980824
     RU 2183448
                      C2
                           20020620
                                          RU 2000-107833
    AT 235215
                      E
                           20030415
                                          AT 1998-942778
     PT 1009366
                      T
                           20030731
                                          PT 1998-942778
                                                           19980824
     ES 2195381
                      Т3
                           20031201
                                          ES 1998-942778
                                                           19980824
```

В1

Α

W

20030708

19970825

19980824

US 2000-486267

20000225

US 6589519

PRAI FR 1997-10617

WO 1998-FR1845

5/4/04 Page 119 Novel compns. containing in a cosmetically acceptable medium at least one AΒ conditioning agent selected among poly- α -olefins, fluorinated oils, fluorinated waxes, fluorinated gums, carboxylic acid esters, cationic polymers, silicon insol. in the medium, mineral, vegetable or animal oils and at least one (AB)n type polyoxyalkylene amine silicon, A being a polysiloxane block and B being a polyoxyalkylene block comprising at least an amine group. Said combination provides cosmetic properties (smoothness, softness) greatly improved compared to the properties obtained by one or the other of the constituents used on its own. Said compns. are used for washing and/ conditioning hair. A shampoo contained sodium lauryl ether sulfate 17, Dehyton AB30 3, amine polyoxyalkylene silicon block (Silsoft A843) 1.5, Jaguar C13S 0.5, copra acid monoisopropanolamide 2, sodium hydroxide q.s. pH = 8.5, and water q.s. 100 IC ICM A61K007-06 ICS A61K007-48 62-3 (Essential Oils and Cosmetics) CC ΙT Polysiloxanes, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (alkyl aryl; cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent) ΙT Cyclosiloxanes

Polymers, biological studies

Polyolefins

Polysaccharides, biological studies

Polysiloxanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

IΤ Polysiloxanes, biological studies

> RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(di-Me, amino-containing; cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

ΙT Hair preparations

> (dyes; cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

ΤŢ Polysiloxanes, biological studies

> RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(polyoxyethylene-polyoxypropylene-; cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

ΙT Polysiloxanes, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(sulfo-containing; cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

ΙT 50-21-5D, Lactic acid, C12-15 alkyl derivs. 57-55-6D, Propylene glycol, C8-10-diacyl esters 78-22-8, Pentaerythritol monoricinoleate 106-19-4, Di-n-propyl adipate 107-43-7D, Betaine, cocoacyl derivs. 109-36-4, Octyl stearate 110-27-0, Isopropyl myristate 110-36-1, Butyl myristate 110-40-7, Diethyl sebacate 123-79-5, Dioctyl adipate 123-95-5, Butyl 140-03-4, Methyl acetyl ricinoleate 142-16-5, Dioctyl maleate 142-91-6, Isopropyl palmitate 537-32-6, Glyceryl trilactate 538-23-8, 627-83-8, Ethylene glycol distearate Glyceryl trioctanoate 628-97-7, Ethyl palmitate 646-13-9, Isobutyl stearate 2306-88-9, Octyl octanoate 2599-01-1, Cetyl myristate 3008-50-2, Pentaerythritol tetraoctanoate

3460-37-5, Hexyl stearate 3687-46-5, Decyl oleate 5303-26-4, Octyl pelargonate 6283-92-7, Lauryl lactate 6938-94-9, Diisopropyl adipate 7491-02-3, Diisopropyl sebacate 9000-30-0D, Guar gum, quaternary compds. 9003-29-6, Polybutene 9004-34-6D, Cellulose, ethers, quaternary compds., biological studies 9004-62-0, Natrosol 250 9004-62-0D, Hydroxyethyl cellulose, quaternary compds. 9004-82-4, Sodium laurylether sulfate 14450-05-6, Pentaerythritol tetrapelargonate 15763-02-7, Dioctyl malate 16958-85-3, Octyl palmitate 17661-50-6, Myristyl stearate 17673-56-2, 18312-31-7, Stearyl octanoate 25339-09-7, Isocetyl Oleyl erucate stearate 26062-79-3, Diallyldimethyl ammonium chloride homopolymer 26590-05-6, Acrylamide-diallyldimethyl ammonium chloride copolymer 27306-90-7, Akypo rlm 45 29710-31-4, Cetyl 29806-73-3, Ethyl-2-hexyl palmitate 31900-57-9, 31900-57-9D, Polydimethylsilanediol, PolydimethylSiloxane TMS-terminated 34316-64-8, Hexyl laurate 34362-27-1, 2-Hexyldecyl 35274-05-6, Cetyl lactate 37309-58-3, Polydecene 42131-25-9, 42131-28-2, Isotearyl lactate 42175-36-0 Isononyl isononanoate 52006-45-8, Isocetyl isostearate 59231-34-4, Isodecyl oleate 62125-22-8, Pentaerythritol tetraisostearate 62479-36-1, Diisostearyl 65497-29-2, Jaquar C13S 69275-03-2, 2-Octyldecyl myristate 71566-49-9, 2-Ethylhexyl isononate 72576-78-4, Isostearyl octanoate 72576-80-8, Isostearyl palmitate 74592-76-0, Triisopropyl citrate 83826-43-1, Octyldodecyl myristate 84878-30-8, Octyl isononanoate 89527-28-6, Isocetyl laurate 90052-75-8, Octyldodecyl stearoyl stearate 93803-89-5, Pentaerythritol tetraisonanoate 94247-28-6, Isocetyl behenate 94248-76-7, Isocetyl octanoate 103300-27-2, Aminol a 15 113431-54-2, Triisostearyl citrate 109485-61-2, Arlamol hd 123759-97-7, Glyceryl undecylenate 126121-35-5 134112-33-7, 2-Octyldecyl palmitate 155665-02-4 156048-34-9 156048-35-0 175831-77-3, Trioleyl citrate 182761-29-1, Kag 40 198133-45-8, Linoleyl lactate 210298-50-3, Isodecyl octanoate 221048-28-8 221048-31-3 221048-34-6 221048-36-8 221130-95-6, Silsoft A 843 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

26062-79-3, Diallyldimethyl ammonium chloride homopolymer IT 26590-05-6, Acrylamide-diallyldimethyl ammonium chloride copolymer RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cosmetic hair compns. containing amine polyoxyalkylene silicon block and conditioning agent)

RN 26062-79-3 HCAPLUS CN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

26590-05-6 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} &= \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● Cl-

CM

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \end{matrix}$$

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

1998:635635 HCAPLUS ΑN

129:280773 DN

ΤI Oxidative hair dye compositions containing 2-hydroxyphenyl benzotriazole derivatives and surfactants

Hawkins, Geoffrey R.; Dolak, Terence M.; Gutkowski, Glenn A. ΙN

PΑ Revlon Consumer Products Corp., USA

SO PCT Int. Appl., 49 pp. CODEN: PIXXD2

DTPatent

English LA

FAN.CNT 1

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PATENT NO.
                 KIND DATE
                                        APPLICATION NO. DATE
                    A1 19980924
                                        WO 1998-US5207 19980317
PΙ
    WO 9841186
        W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH,
            GW, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MD,
            MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR,
            TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI,
            FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
            GA, GN, ML, MR, NE, SN, TD, TG
                                         US 1997-819809
    US 5843193
                          19981201
                                                           19970318
                      A
    CA 2255715
                           19980924
                                          CA 1998-2255715 19980317
                      AA
    AU 9865613
                      Α1
                           19981012
                                          AU 1998-65613
                                                           19980317
    AU 725070
                      B2
                           20001005
                                         EP 1998-911725
    EP 910330
                      A1
                           19990428
                                                           19980317
    EP 910330
                     В1
                           20031022
        R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE, IE, FI
    BR 9804784
                          19990817
                                         BR 1998-4784
                                                           19980317
                    Α
    NZ 332989
                     Α
                           20000327
                                         NZ 1998-332989
                                                           19980317
    JP 2001505923 T2 20010508
AT 252361 E 20031115
                                         JP 1998-540717
                                                           19980317
                                         AT 1998-911725
                                                           19980317
                          19980923
                                         ZA 1998-2287
    ZA 9802287
                    A
                                                           19980318
    TW 513313
                     B 20021211
                                         TW 1998-87104020 19980318
    NO 9805354
                     A 19990118
                                         NO 1998-5354
                                                           19981117
    KR 2000011141
                    A 20000225
                                         KR 1998-709301
                                                         19981118
PRAI US 1997-819809 A
                          19970318
    WO 1998-US5207
                     W
                          19980317
OS
    MARPAT 129:280773
AΒ
    A composition for oxidative dyeing of hair comprises, by weight of the
    total composition; 0.0001-20 % of at least one primary intermediate and at
    least one coupler for the formation of oxidation dyes, 0.01-10 % of
    a 2-hydroxyphenyl benzotriazole compound which absorbs UV radiation in the
    wavelength range of 200 to 400 nm, 0.5-20 % surfactant, and 10-65 % water.
    A two component kit containing the hair dye composition and a developer,
    and a method for oxidative dyeing of hair with said kit is also
                 A hair dye composition contained ammonium lauryl sulfate
    disclosed.
    2.00, propylene glycol 4.00, ethoxydiglycol 2.00, monoethanolamine 5.00,
    seaweed extract 0.80, EDTA 0.80, isoascorbic acid 0.20, sodium sulfite 0.50,
    primary intermediates and couplers 5.00, oleic acid 12.50, cetearyl alc.
    4.00, emulsifying wax 2.00, oleth-20 1.00, steareth-21 0.70, meadowfoam
    seed oil 0.75, oleyl alc. 0.40, Polyquaternium-10 0.20, Polyquaternium-28
    0.50, mica/titanium dioxide 0.30, hydrolyzed wheat protein 1.00, Cibafast
    W liquid 1.00, fragrance 5.00, wheat amino acids 1.00, and water q.s. 100%.
IC
    ICM A61K007-06
    ICS A61K007-13; A61K007-42
CC
     62-4 (Essential Oils and Cosmetics)
    oxidative hair dye benzotriazole deriv surfactant
ST
ΙT
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C16-18, ethoxylated; oxidative hair dye compns. containing
       hydroxyphenyl benzotriazole derivs. and surfactants)
    Alcohols, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (C16-18; oxidative hair dye compns. containing hydroxyphenyl
       benzotriazole derivs. and surfactants)
TT
    Fats and Glyceridic oils, biological studies
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RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (Limnanthes alba seed; oxidative hair dye compns. containing
        hydroxyphenyl benzotriazole derivs. and surfactants)
ΙT
        (amphoteric; oxidative hair dye compns. containing hydroxyphenyl
        benzotriazole derivs. and surfactants)
IT
     Hair preparations
        (conditioners; oxidative hair dye compns. containing
        hydroxyphenyl benzotriazole derivs. and surfactants)
ΙT
     Cyclosiloxanes
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (di-Me; oxidative hair dye compns. containing hydroxyphenyl
        benzotriazole derivs. and surfactants)
ΤТ
     Hair preparations
        (dyes, oxidative; oxidative hair dye compns. containing
        hydroxyphenyl benzotriazole derivs. and surfactants)
ΙT
        (nonionic; oxidative hair dye compns. containing hydroxyphenyl
        benzotriazole derivs. and surfactants)
IT
     Surfactants
        (oxidative hair dye compns. containing hydroxyphenyl
        benzotriazole derivs. and surfactants)
IT
    Polysiloxanes, biological studies
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (oxidative hair dye compns. containing hydroxyphenyl
       benzotriazole derivs. and surfactants)
IT
     Surfactants
        (zwitterionic; oxidative hair dye compns. containing
        hydroxyphenyl benzotriazole derivs. and surfactants)
     2235-54-3, Ammonium lauryl sulfate 7722-84-1, Hydrogen peroxide,
ΤТ
    biological studies
                         9003-39-8, Poly(vinylpyrrolidone)
                                            9004-98-2, Oleth-20
    Cellulose, ethers, biological studies
    25751-21-7, Acrylic acid-methacrylic acid copolymer
    26062-79-3, Poly(dimethyldiallylammonium chloride)
    26590-05-6, Acrylamide-dimethyldiallylammonium chloride copolymer
                81859-24-7, Polyquaternium-10
                                                 92484-48-5, Cibafast W
     56275-01-5
    131954-48-8, Polyquaternium-28
                                     157956-72-4D,
    trimethylsilyl-terminated
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. containing hydroxyphenyl
       benzotriazole derivs. and surfactants)
ΙT
    25751-21-7, Acrylic acid-methacrylic acid copolymer
    26062-79-3, Poly(dimethyldiallylammonium chloride)
    26590-05-6, Acrylamide-dimethyldiallylammonium chloride copolymer
    131954-48-8, Polyquaternium-28
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (oxidative hair dye compns. containing hydroxyphenyl
        benzotriazole derivs. and surfactants)
RN
     25751-21-7 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, polymer with 2-propenoic acid (9CI) (CA
     INDEX NAME)
     CM
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CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 2

CRN 79-10-7 CMF C3 H4 O2

26062-79-3 HCAPLUS RN

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \longrightarrow \text{CH}_2 \end{matrix}$$

RN 131954-48-8 HCAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 51410-72-1

CMF C10 H21 N2 O . C1

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{Me}_3 + \text{N} - \text{(CH}_2)_3 - \text{NH} - \text{C} - \text{C} - \text{Me} \end{array}$$

• cl-

CM 2

CRN 88-12-0 CMF C6 H9 N O

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L31 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    1998:612011 HCAPLUS
DN
    129:235420
TI
    Hair dye preparations comprising polymers and reducing agents
ΙN
    Malle, Gerard; Leroy, Frederic; Duvault, Yolanda
PA
     L'oreal, Fr.
SO
     PCT Int. Appl., 39 pp.
     CODEN: PIXXD2
DT
     Patent
LA
    French
FAN.CNT 1
    MO 9839074 AIND DATE APPLICATION NO. DATE
                                          -----
PΙ
    WO 9838974
                     Al 19980911
                                         WO 1998-FR420 19980304
        W: CA, JP, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                         FR 1997-2537
     FR 2760359
                     A1 19980911
                                                           19970304
     FR 2760359
                      В1
                            20000107
     EP 967963
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                          20000105
                                         EP 1998-913822
                                                           19980304
        R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE
                                         JP 1998-538233
     JP 2001513804 T2 20010904
                                                           19980304
                                          US 1999-380459
                     B1 20020326
     US 6361767
                                                           19991122
US 2002108188 A1 20020815
PRAI FR 1997-2537 A 19970304
WO 1998-FR420 W 19980304
                     A1 20020815
                                          US 2002-55366
                                                           20020125
     US 1999-380459 A3 19991122
    MARPAT 129:235420
OS
    A method for treating hair keratin fibers to provide them with new
AB
     appropriate properties, comprising the following steps: reducing the
     sulfur bonds of hair keratin to generate, only at the surface of the
     fibers at a depth less than 10 \ \mu m reactive sites and in fixing
     covalently on said reactive sites at least one active compound for providing
     the hair keratin fibers with new appropriate properties, said active
     compound containing at least a reactive function capable of reacting with said
     reactive sites formed at the keratin fiber surface. This method is
     applicable to the treatment of fibrous or non-fibrous keratin substances
     of human or animal origin. A lotion containing tris(2-carboxyethyl)phosphine
     14.23, hydroxyethyl cellulose 1.00, 20% ammonia q.s. pH = 6, water and
     100.00 g was applied on a gray hair for 5 min., then the hair was rinsed
     followed by application of a composition containing Procion Yellow MX-8G 0.01,
     Procion Red MX5B 0.01, Lanasol blue 3G 0.01, hydroxyethyl cellulose 1.00,
     lactic acid q.s. pH = 4, and water q.s. 100.00 g. The hair was then
     washed, shampooed, and dried. The yellowish shade of the hair was
     completely removed.
    ICM A61K007-09
ICS A61K007-04; D06M013-244
IC
     62-3 (Essential Oils and Cosmetics)
CC
     Section cross-reference(s): 38
     hair dye polymer reducing agent; lotion hair dye
ST
     phosphine polymer
ΙT
     Dyes
     Sunscreens
        (hair prepns. comprising polymers and reducing agents)
     5961-85-3, Tris(2-carboxyethyl)phosphine 9016-00-6D,
     Polydimethylsiloxane, vinyl-containing 16940-66-2, Sodium
     borohydrate 17804-49-8, Procion Red MX5B 31900-57-9D,
```

Polydimethylsiloxane, vinyl-containing 32360-05-7, Octadecyl

` ELHILO 10/691427

5/4/04

Page 127

methacrylate 47658-69-5 70209-99-3, Lanasol blue 3G 70865-29-1, Procion Yellow MX-8G **212961-69-8 212961-70-1** 212961-71-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair prepns. comprising polymers and reducing agents)

IT 212961-69-8 212961-70-1

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair prepns. comprising polymers and reducing agents)

RN 212961-69-8 HCAPLUS

●2 OH -

RN 212961-70-1 HCAPLUS

CN 2-Propenoic acid, methyl ester, polymer with dihydro-2(3H)-thiophenone and 1,2-ethanediamine (9CI) (CA INDEX NAME)

CM 1

CRN 1003-10-7 CMF C4 H6 O S

CM 2

CRN 107-15-3 CMF C2 H8 N2

H2N-CH2-CH2-NH2

CM 3

CRN 96-33-3 CMF C4 H6 O2

```
0
MeO-C-CH=CH2
```

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:633690 HCAPLUS

DN 119:233690

TIHair dyeing or bleaching compositions containing nonionic surfactants and cationic or amphoteric polymers

ΙN Millequant, Jean-marie; Boudy, Francois

PΑ Oreal S. A., Fr.

Eur. Pat. Appl., 15 pp. SO

CODEN: EPXXDW

DT Patent

LA French FAN CNT 1

ran.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 557203	A1	19930825	EP 1993-400433	19930219
	EP 557203	В1	19960710		
	EP 557203	В2	19981202		
	R: AT, BE,	CH, DE	, DK, ES, FR,	GB, GR, IE, IT, LI	, NL, PT, SE
	FR 2687570	A1	19930827	FR 1992-2051	19920221
	FR 2687570	B1	19950602		
	ZA 9301142	A	19940818	ZA 1993-1142	19930218
	CA 2089988	AA	19930822	CA 1993-2089988	19930219
	CA 2089988	С	20000215		
	AT 140151	E	19960715	AT 1993-400433	19930219
	ES 2089741	тЗ	19961001	ES 1993-400433	19930219
	AU 9333720	A1	19930826	AU 1993-33720	19930222
	AU 666703	В2	19960222		
	JP 07267836	A2	19951017	JP 1993-72751	19930222
	US 6312677	В1	20011106	US 1995-424600	19950417
PRAI	FR 1992-2051	A	19920221		

A cosmetic composition contains a nonionic surfactant such as (ethoxylated) AΒ fatty alcs. 14-50, and a cationic or amphoteric polymer 0.05-10%; the composition is stable at room temperature and pH of >5.5. A hair bleach contained

ethoxylated oleocetyl alc. 4.2, ethoxylated luaryl alc. 4.8, cetylstearyl alc. 3, ethoxylated decyl alc. 13.2, Merquat-100 3, 20% solution of ammonia 12, paraphenylenediamine 0.45, m-dihydroxybenzene 0.35, 35% solution of Na bisulfite 1.8, fragrance q.s., and water q.s. to 100q; pH=10.9.

IC ICM A61K007-08

US 1993-20972

ICS A61K007-13; A61K007-135; A61K007-06

В1

CC 62-3 (Essential Oils and Cosmetics)

ST hair dye bleach surfactant polymer; fatty alc polymer hair compn; Merquat lauryl alc bleach hair

19930222

Ionene polymers

Polyamines

RL: BIOL (Biological study)

(hair dyes and hair bleaches containing nonionic surfactants and)

Alcohols, biological studies

RL: BIOL (Biological study)

```
(C16-18, hair dyes and hair bleaches containing cationic or
        amphoteric polymers and)
ΤT
     Polyamides, biological studies
     RL: BIOL (Biological study)
        (amino-containing, hair dyes and hair bleaches containing nonionic
        surfactants and)
ΙT
     Siloxanes and Silicones, biological studies
     RL: BIOL (Biological study)
        (cationic, hair dyes and hair bleaches containing nonionic
        surfactants and)
     Hair preparations
IT
        (dyes, nonionic surfactants and cationic polymers in)
ΤТ
    Alcohols, biological studies
     RL: BIOL (Biological study)
        (fatty, hair dyes and hair bleaches containing cationic or
        amphoteric polymers and)
ΤT
    Alcohols, compounds
     RL: BIOL (Biological study)
        (fatty, ethoxylated, hair dyes and hair bleaches containing
        cationic or amphoteric polymers and)
ΙT
    Alcohols, compounds
     RL: BIOL (Biological study)
        (fatty, propoxylated, hair dyes and hair bleaches containing
        cationic or amphoteric polymers and)
IΤ
     Surfactants
        (nonionic, hair dyes and hair bleaches containing cationic or
        amphoteric polymers and)
    Polysaccharides, biological studies
TΤ
     Proteins, specific or class
     RL: BIOL (Biological study)
        (quaternary ammonium group-containing, hair dyes and hair
       bleaches containing nonionic surfactants and)
IT
     143-28-2, Oleyl alcohol
                              9002-92-0, Ethoxylated lauryl alcohol
     9004-98-2
                 9005-00-9, Ethoxylated stearyl alcohol 9016-45-9,
     Ethoxylated nonyl phenol 9036-19-5, Ethoxylated octyl phenol
                                                                       9064-14-6
     25322-68-3D, oleocetyl and cetylstearyl ethers 25618-55-7, Polyglycerol
     26183-52-8
                  26636-40-8
                              52292-17-8, Ethoxylated isostearyl alcohol
     122729-62-8
    RL: BIOL (Biological study)
        (hair dyes and hair bleaches containing cationic or amphoteric
        polymers and)
    1398-61-4D, Chitin, derivs.
                                   9007-16-3, Carbopol 934 26062-79-3
     , Merquat 100 53694-17-0, Merquat 280
                                            81859-24-7
     131954-48-8, Gafquat HS 100
    RL: BIOL (Biological study)
        (hair dyes and hair bleaches containing
       nonionic surfactants and)
ΙT
    26062-79-3, Merquat 100 53694-17-0, Merquat 280
     131954-48-8, Gafquat HS 100
    RL: BIOL (Biological study)
        (hair dyes and hair bleaches containing
        nonionic surfactants and)
    26062-79-3 HCAPLUS
RN
CN
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer
     (9CI)
           (CA INDEX NAME)
    CM
    CRN 7398-69-8
```

CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH}_-\text{CH}_2 - \text{N}_-^+ \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

• c1-

53694-17-0 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenoic acid (9CI) (CA INDEX NAME)

CM

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

131954-48-8 HCAPLUS RN

CN 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, chloride, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM1

CRN 51410-72-1 CMF C10 H21 N2 O . C1

● cl-

CM 2

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 30 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:588281 HCAPLUS

DN 119:188281

TI Acidic hair **dyeing** compositions

IN Ishikawa, Hiroshi; Hyodo, Yoshiho; Arai, Yasuhiro

PA Shiseido Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI JP 05194161 A2 19930803 JP 1992-231326 19920806
PRAI JP 1991-232190 19910820

The title compns., which show coloring power and are shampoo-resistant, contain 0.01-15.0 weight% cationic compds. and optionally 0.01-5.0 weight% silicones. Japan Black 401 0.2, Japan Purple 401 0.3, Japan Yellow 4 0.1, benzyl alc. 5.0, tetrahydrofurfuryl alc. 12.0, citric acid 2.0, stearyltrimethylammonium chloride 0.3, hydroxyethyl cellulose 3.0, and H2O to 100% were mixed to give a dyeing composition, which showed good coloring power and rinse effect.

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

ST hair acid dye cation silicone

IT Siloxanes and Silicones, biological studies

RL: BIOL (Biological study)

(hair **dyeing** compns. containing acidic **dyes** and cations and)

IT Hair preparations

(dyes, acidic dyes and cations in, with rinse effect)

IT 112-03-8, Stearyltrimethylammonium chloride 26590-05-6, Merquat

Page 132

550 **53633-54-8**, Gafquat 755 63601-33-2, Polyquart H

81859-24-7

RL: BIOL (Biological study)

(hair dyeing compns. containing acidic dyes

and)

1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4 4430-18-6, Japan ΙT Purple 401

RL: BIOL (Biological study)

(hair dyeing compns. containing cations and)

26590-05-6, Merquat 550 **53633-54-8**, Gafquat 755 ΙT

RL: BIOL (Biological study)

(hair dyeing compns. containing acidic dyes and)

26590-05-6 HCAPLUS RN

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with CN 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N}^+ - \text{CH}_2 - \text{CH} = \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● c1-

СМ 2

CRN 79-06-1 CMF C3 H5 N O

53633-54-8 HCAPLUS RN

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with CN 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM1

CRN 64-67-5 CMF C4 H10 O4 S

CM2

CRN 30581-59-0

CMF (C8 H15 N \cdot O2 . C6 H9 N O) x

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

1992:619731 HCAPLUS AN

DN 117:219731

TIHair dyes containing phenol compounds-containing shampoos and mordant-containing rinses

Miyamoto, Nobuo; Kurokawa, Hideo; Shinjo, Zentaro ΙN

Lion Corp., Japan PΑ

Jpn. Kokai Tokkyo Koho, 11 pp. SO

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE _____ _____ JP 04164017 A2 19920609 JP 1990-288381 19901029 PRAI JP 1990-288381 19901029

Hair dyes are composed of shampoos containing gallic acid, tannic AΒ acid, salicylic acid, their derivs., pyrogallol, catechol, and/or hematin IC

CC

ST

ΙT

ΙT

TT

ΤT

TT

IT

ΙT

ΙT

IT

ΙT

IT

IT

```
and surfactants as detergents and rinses containing polyvalent metal salts and
     cationic polymers. Repeated use of the shampoos and rinses gradually
     dye hair without damage to hair and skin. Hair was repeatedly
     treated with a shampoo containing Na \alpha-olefinsulfonate 15, coco
     amidopropylbetaine 5, coco fatty acid diethanolamide 2, Pr gallate 0.2,
    Na2SO4 1.5, citric acid 0.2, BzONa 0.9, perfume 0.5 weight%, colorant, and
    H2O balance and a rinse containing cetostearyltrimethylammonium chloride 1.0,
     cetostearyl alc. 3.0 sorbitan monostearate 0.5, polyoxyethylene glyceryl
    pyroglutamate isostearate 0.5, propylene glycol 5.0, p-HOC6H4CO2Me 0.3,
    perfume 0.5 weight%, colorant, and H2O balance 20 times to show good
    dyeing appearance.
    ICM A61K007-13
    62-3 (Essential Oils and Cosmetics)
    hair dye shampoo rinse; phenol compd hair dye shampoo;
    metal mordant hair dye rinse
     Siloxanes and Silicones, biological studies
     RL: BIOL (Biological study)
        (hair dyes composed of phenol compds.-containing shampoos and
        rinse containing metal salt mordants and cationic surfactants and)
     Salts, biological studies
     RL: BIOL (Biological study)
        (hair dyes composed of phenol compds.-containing shampoos and
        rinses containing cationic surfactants and)
     Tannins
     RL: BIOL (Biological study)
        (hair dyes containing metal salts mordant-containing rinses and
        shampoos containing surfactants and)
     Shampoos
        (phenol compds.-containing, hair dyes composed of metal salt
        mordants-containing rinses and)
     Quaternary ammonium compounds, biological studies
     RL: BIOL (Biological study)
        (C16-18-alkyltrimethyl, chlorides, hair dyes composed of
        phenol compds.-containing shampoos and rinses containing cationic
surfactants
        and)
     Polyelectrolytes
        (cationic, hair dyes composed of metal salts mordant-containing
        rinses and shampoos containing phenol compds. and surfactants and)
     Betaines
     RL: BIOL (Biological study)
        (coco amidopropyl, hair dyes composed of metal salts
        mordant-containing rinses and shampoos containing phenol compds. and)
     Amides, biological studies
     RL: BIOL (Biological study)
        (coco, N, N-bis(hydroxyethyl), hair dyes composed of metal
        salts mordant-containing rinses and shampoos containing phenol compds. and)
     Siloxanes and Silicones, biological studies
     RL: BIOL (Biological study)
        (di-Me, hair dyes composed of phenol compds.-containing shampoos
        and rinse containing metal salt mordants and cationic surfactants and)
     Hair preparations
        (dyes, phenol compds.-containing shampoos and metal salt
        mordants-containing rinses in)
     26590-05-6, Merquat 550
                              81859-24-7
     RL: BIOL (Biological study)
        (hair dyes composed of metal salts mordant-containing
        rinses and shampoos containing phenol compds. and surfactants and)
                              7705-08-0, Ferric chloride, biological studies
```

7439-89-6D, Iron, salts

7720-78-7, Ferrous sulfate 7758-94-3, Ferrous chloride 10028-22-5, Ferric sulfate

RL: BIOL (Biological study)

(hair dyes composed of phenol compds.-containing shampoos and rinses containing cationic surfactants and)

107-64-2, Distearyldimethylammonium chloride 112-03-8,

Stearyltrimethylammonium chloride 144315-10-6D, N-cocoyl derivs., esters RL: BIOL (Biological study)

(hair ${\tt dyes}$ composed of phenol compds.-containing shampoos and rinses containing metal salts mordant and)

56-86-0D, L-Glutamic acid, N-cocoyl derivs., sodium salts IT120-80-9, Salicylic acid, biological studies 87-66-1, Pyrogallol Catechol, biological studies 121-79-9, Propyl gallate 149-91-7, Gallic acid, biological studies 149-91-7D, Gallic acid, alkyl esters 831-61-8, Ethyl gallate 9004-82-4 15489-90-4, Hematin 42926-22-7, Sodium N-lauroylglutamate RL: BIOL (Biological study)

(hair dyes containing metal salts mordant-containing rinses and shampoos containing surfactants and)

26590-05-6, Merquat 550

RL: BIOL (Biological study)

(hair dyes composed of metal salts mordant-containing rinses and shampoos containing phenol compds. and surfactants and) 26590-05-6 HCAPLUS

 $\hbox{2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, polymer with}\\$ CN 2-propenamide (9CI) (CA INDEX NAME)

CM 1

RN

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

L31 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN 1988:576095 HCAPLUS

```
DN
     109:176095
TΙ
     Hair conditioners containing poly(alkyloxazoline) and cationic polymers
IN
     Grollier, Jean Francois; Dubief, Claude
PΑ
     Oreal S. A., Fr.
     Ger. Offen., 16 pp.
SO
     CODEN: GWXXBX
\mathsf{DT}
     Patent
LA
     German
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
ΡI
     DE 3731477
                     A1 19880324
                                          DE 1987-3731477 19870918
     DE 3731477
                      C2
                          19990121
                                          FR 1987-12876
     FR 2604087
                      A1
                          19880325
                                                           19870917
                          19910503
     FR 2604087
                      В1
     NL 8702224
                                          NL 1987-2224
                     Α
                           19880418
                                                           19870917
     US 4867966
                                          US 1987-97703
                     Α
                           19890919
                                                           19870917
    CH 673772
                           19900412
                                          CH 1987-3590
                     Α
                                                           19870917
     GB 2195534
                     A1
                          19880413
                                          GB 1987-21973
                                                           19870918
     GB 2195534
                      В2
                          19901024
     JP 63088116
                      A2
                          19880419
                                          JP 1987-234697
                                                           19870918
     BE 1000437
                      A3
                          19881206
                                          BE 1987-1051
                                                           19870918
     CA 1295256
                      Α1
                           19920204
                                          CA 1987-547280
                                                           19870918
PRAI LU 1986-86599
                           19860919
AΒ
    The title cosmetic contains ≥1 poly(oxazoline) derivs.
     [N(COR)CH2CH2]n (I; R = alkyl, n = polymeric) with mol. weight >10,000, and
     ≥1 cationic polymers. The cationic polymer may be selected from
     quaternized polymers or polysiloxanes, poly(amines),
     poly(aminoamides), or quaternary polyammonium compds. This cosmetic
     composition is useful for the conditioning treatment of hair following a hair
     waving procedure, dyeing, or shampooing; I are capable of
     imparting body and bounce to the hair, but only in combination with
     cationic polymers are shine, manageability, and softness imparted
     satisfactorily. A wave setting lotion contained I (R = Et) (polymer XAS
     10874-03) 0.6, Gaffix VC 713 (cationic terpolymer) 0.5, H2O 100 g, and
     sufficient EtOH, 2-amino-2-methyl-1-propanol, perfume, color and
     preservative.
IC
     ICM A61K007-06
     ICS A61K007-09
ICA C08L079-00; C08L039-04; C08L033-14; C08L005-00; C08L001-08
     62-4 (Essential Oils and Cosmetics)
CC
ΙT
     Siloxanes and Silicones, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair conditioners containing poly(alkyloxazolione) and)
     30581-59-0 63451-27-4 87914-10-1, Croquat S 92183-41-0
ΙT
     102972-64-5
                 108422-88-4, Ucar ALE 56
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (hair conditioners containing poly(alkyloxazoline) and)
ΙT
     88-12-0D, polymers with dialkylaminoalkyl acrylate 2235-00-9D, polymers
     with vinylpyrrolidone and dialkylaminoalkylacrylate 9004-34-6D,
     Cellulose, ethers, quaternized derivs. 31672-68-1D, salts
     53633-54-8 61840-27-5 83138-06-1, Crotein Q
                                                      94395-78-5
                 100843-04-7, Hercofloc 1031
     95144-24-4
                                              117158-60-8D, salts
     117158-61-9D, salts
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair conditioners containing poly(alkyloxazolione) and)
```

IT 106-89-8D, polymers, condensates with polyamines 75345-27-6
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)

(hair conditioners containing poly(alkyoxazolines) and)

IT 30581-59-0 92183-41-0 102972-64-5
RL: BUU (Biological use, unclassified); BIOL (Biolog

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair conditioners containing poly(alkyloxazoline) and)

RN 30581-59-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{--CH}_2 \text{--O-C-C-Me} \end{array}$$

CM 2

CRN 88-12-0 CMF C6 H9 N O

RN 92183-41-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2-propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \mid \\ \downarrow \\ \text{H}_2\text{C} = \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

2 CM

CRN 9004-62-0

CMF C2 H6 O2 . x Unspecified

CM3

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 4

CRN 107-21-1

CMF C2 H6 O2

 $HO-CH_2-CH_2-OH$

RN 102972-64-5 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with CN 1-ethenylhexahydro-2H-azepin-2-one and 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2

CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 2

CRN 2235-00-9 CMF C8 H13 N O

CH = CH2

CM

CRN 88-12-0

CMF C6 H9 N O

ΙT 31672-68-1D, salts 53633-54-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(hair conditioners containing poly(alkyloxazolione) and)

RN 31672-68-1 HCAPLUS

Poly[(dimethyliminio)-1,3-propanediyl(dimethyliminio)-1,6-hexanediyl] CN(9CI) (CA INDEX NAME)

RN 53633-54-8 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with CN 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

> CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N}-\text{CH}_2-\text{CH}_2-\text{O}-\text{C}-\text{C}-\text{Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

ΙT 75345-27-6

> RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair conditioners containing poly(alkyoxazolines) and)

RN 75345-27-6 HCAPLUS

CN Poly[(dimethyliminio)-2-butene-1,4-diyl chloride], α -[4-[tris(2hydroxyethyl) ammonio] -2-butenyl] - ω -[tris(2-hydroxyethyl) ammonio] -, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

●3 Cl-

PAGE 1-B

L31 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

1988:156256 HCAPLUS AN

DN 108:156256

TΙ Agents for dyeing or bleaching of hair

ΙN Madrange, Annie; Canivet, Patrick

Oreal S. A., Fr. PΑ SO Ger. Offen., 24 pp. CODEN: GWXXBX DT Patent LA German FAN.CNT 1

	PATENT NO.	KIND	DATE	API	PLICATION NO.	DATE
ΡI	DE 3712005	A1	19871022	DE	1987-3712005	19870409
	DE 3712005	C2	20011018			
	FR 2596985	A1	19871016	FR	1986-5149	19860410
	FR 2596985	В1	19900824			
	CA 1283862	A1	19910507	CA	1987-533746	19870403
	CH 674460	A	19900615	CH	1987-1394	19870409
	GB 2188948	A1	19871014	GB	1987-8585	19870410
	GB 2188948	В2	19901114			
	JP 62242609	A2	19871023	JP	1987-88568	19870410
	BE 1004391	A4	19921117	BE	1987-382	19870410
	US 5143518	A	19920901	US	1991-719366	19910624
PRAI	FR 1986-5149	A	19860410			
	US 1987-37015	B1	19870410			
	US 1989-301879	B1	19890126			
7A D	mba bibla assault		1114			

The title agents are made of alkali metal or alkanolamine salts of C12-18 fatty acids, a cationic or amphoteric silicone polymer (Ucan Silicone Ale 56, Abil 9950, etc.), a cationic surfactant (Noramium M2CD, Argust 2HT75, Ammonyx 4002, etc.), an alkalizing agent, and a cationic polymer. cationic polymer is a quaternary polyammonium polymer, vinylpyrrolidone dialkylaminoalkyl(meth)acrylate copolymer (eventually quaternized), poly(methacrylamidopropyltrimethylammonium chloride), and cationic proteins and polyaminoamides, eventually cross-linked or alkylated. agents are mixed with an oxidant, shortly before use. For dyeing , the agents are also mixed with oxidative dye precursors and, eventually, coupling and reducing agents. The above agents have a good foaming capacity and are readily dispersed in the hair. They improve the cosmetic properties of the hair, especially the combing capacity, and impart a silky look. A hair dye comprised oleic acid 10.4, triethanol amine 5.44, Mirapol Al5 0.1, ceraphyl 60 0.1, cationic emulsion Q.2.7224 0.5, 35% NaHSO3 solution 1.3, penta-Na diethylenetriaminepentaacetate 2.4, p-phenylenediamine 0.027, resorcinol 0.033, m-aminophenol 0.030, hydroquinone 0.15, 20% NH3 10, and H2O to 100 parts by weight Before use, the dye (100 g) is mixed with 100 g 6% H2O2.

IC ICM A61K007-13

ICS A61K007-135; D06P003-08

ICA C08L083-08; C08L079-02; C08L077-00; C08L089-00; D06P001-32; B01F017-18; A61K007-06

ICI C08L039-06, C08L033-14

CC 62-3 (Essential Oils and Cosmetics)

SThair dye oxidative silicone; polymer cationic hair dye ; bleaching agent hair silicone

ΙT Protein hydrolyzates

RL: BIOL (Biological study)

(compds. with (Z)-N-[3-(dimethylamino)propyl]-9-octadecenamide, hairdye and bleaching agent containing)

ΙT Siloxanes and Silicones, biological studies

RL: USES (Uses)

(hair **dye** and bleaching agent containing)

ΙT Quaternary ammonium compounds, biological studies

RL: USES (Uses)

(C20-22-alkyltrimethyl, chlorides, hair dye and bleaching

Page 142

agent containing)

IT Quaternary ammonium compounds, uses and miscellaneous

RL: USES (Uses)

(bis(hydrogenated tallow alkyl)dimethyl, chlorides, hair dye and bleaching agent containing)

IT Polyelectrolytes

Surfactants

(cationic, hair dye and bleaching agent containing)

IT Hair preparations

(dyes, oxidative, silicones- and cationic polymers-containing)

IT Collagens, compounds

RL: BIOL (Biological study)

(hydrolyzates, (coco alkyldimethylammonio)alkyl, hair dye and

bleaching agent containing)

IT 109-28-4D, protein hydrolyzates 122-19-0 475-03-6, Ionene 3401-74-9

26062-79-3, Merquat 100 51812-80-7, Ceraphyl 60

53633-54-8, Gafquat 734 61840-27-5 63451-27-4, Mirapol A 15

94395-78-5 101993-82-2 102523-94-4 102523-96-6 108422-88-4, Ucar

silicone ALE 56 113784-58-0 RL: BIOL (Biological study)

(hair dye and bleaching agent containing)

IT 26062-79-3, Merquat 100 53633-54-8, Gafquat 734

RL: BIOL (Biological study)

(hair dye and bleaching agent containing)

RN 26062-79-3 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● C1-

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) x

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

L31 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1983:95492 HCAPLUS

98:95492 DN

Composition for treating the hair ΤI

IN Grollier, Jean Francois; Fiquet, Claire; Fourcadier, Chantal; Dufief, Claude; Mondet, Jean; Cauwet, Daniele

PΑ Oreal S. A. , Fr.

Ger. Offen., 80 pp. SO

CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 3216687	A1	19821202	DE 1982-3216687	19820504
	DE 3216687	C2	19960718		
	SE 8202843	A	19821109	SE 1982-2843	19820506
	DK 8202042	A	19821109	DK 1982-2042	19820506

 $_{
m H2C}$ = $_{
m CH}$ - $_{
m SO3H}$

CM 2

CRN 79-06-1 CMF C3 H5 N O

 $\begin{array}{c} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \Longrightarrow \text{CH}_2 \end{array}$

IT 26590-05-6 53633-54-8 68393-49-7

75345-27-6 92183-41-0

RL: BIOL (Biological study)

(hair prepns. and shampoos containing vinylsulfonate polymers and)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

 $\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$

• c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

0 || H₂N-C-CH-CH₂

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

RN 68393-49-7 HCAPLUS

CN Poly[(dimethyliminio)-1,3-propanediyl(dimethyliminio)-1,6-hexanediyl dichloride] (9CI) (CA INDEX NAME)

$$\begin{bmatrix} & \text{Me} & \text{Me} \\ & & | \\ ---- & \text{N}^{+} & (\text{CH}_{2}) & 3 - \text{N}^{+} & (\text{CH}_{2}) & 6 - \\ & & | & | \\ & \text{Me} & \text{Me} \end{bmatrix}$$

●2 C1-

75345-27-6 HCAPLUS RN

CN Poly[(dimethyliminio)-2-butene-1,4-diyl chloride], α -[4-[tris(2hydroxyethyl) ammonio] -2-butenyl] - ω -[tris(2-hydroxyethyl) ammonio] -, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

●3 C1-

PAGE 1-B

92183-41-0 HCAPLUS RN

CNCellulose, 2-hydroxyethyl ether, polymer with N,N-dimethyl-N-2-propenyl-2propen-1-aminium chloride (9CI) (CA INDEX NAME)

CM1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \operatorname{Me} \\ \operatorname{H_2C} = \operatorname{CH-CH_2-N}^+ \\ \operatorname{CH_2-CH} = \operatorname{CH_2} \\ \operatorname{Me} \end{array}$$

● cl-

CM2

CRN 9004-62-0

CMF $C2 \ H6 \ O2 \ . \ x \ Unspecified$

CM3

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM

CRN 107-21-1

CMF C2 H6 O2

 ${\tt HO-CH_2-CH_2-OH}$

=>